ANTHEM™

"WARNING: ANTHEM GEAR MAY BE ADDICTIVE."

– Eric D. Hetherington, GoodSound!

For over fifteen years Sonic Frontiers International and Anthem have manufactured award-winning high-end Power Amplifiers, Preamplifiers/Surround-Sound Processors, CD Players, CD Transports and Digital-to-Analog Converters of the finest quality. We enjoy an enviable reputation for products that allow you to virtually "be there" every time you listen to your favorite piece of recorded music or experience the excitement of surround-sound home theater. Our products are used internationally at all levels of music reproduction and our reputation in analog and digital design is legendary. Throughout Europe, the United Kingdom, Asia and across North America our products receive awards and acclaim in the best-known publications.

The addition of Anthem™ Statement pushes the boundaries of high-end audio/video design, placing Anthem at the leading edge of the art.

FIRST PLACE OVERALL! Anthem has been honored with two consecutive awards for "First Place Overall" in the prestigious **inside track*** Annual Survey.

*An annual independent nationwide survey of consumer electronics specialist retailers and custom installers.

"… SPECTACULAR … cutting edge … detail to die for … equal to or better than the best …"

– Thomas J. Norton, Stereophile UltimateAV

"… intoxicating … the D1 just floored us … 'Is this really digital audio?' I kept asking … it sounds so darn ANALOG … absolute neutrality … so transparent I ceased to 'notice' it … insane exploitation of the CD's dynamic range … I just can't take any portion of the spectrum and pigeon-hole it for you … everything is just 'right' … a huge winner … YES, IT'S THAT GOOD!"

– Brian Florian, Secrets of Home Theater and High Fidelity

"… spectacular … possibly the best all around AV preamp on the market … open, dynamic and effortless … lusciously detailed … stunning detail … three dimensional and exciting … my system has never sounded better than with the D1 at the reins."

– Christopher Zell, AudioVideo Revolution

"Anthem has totally hit a home run … I can't think of a better processor … sound is neutral — and very full … top end is well defined — full, clear and revealing … mid range is also well detailed and neutral … Bass is full and defined … very, very impressive performance …"

– Manoj Motwani, HDTVetc.

THE ULTIMATE HIGH-END STATEMENT

The D1 contains nine high-end components in one:

- Preamplifier
- Built-in 24-Bit/192-kHz Precision Upsampler
- Analog-to-Digital Converter (ADC)
- Digital-to-Analog Converter (DAC)
- Surround-Sound Processor
- Highest-Quality HDTV Video Switcher
- Multiroom/Whole-House Entertainment Control Center
- FM/AM Tuner
- Headphone Preamplifier

The D1 is first of all a cutting-edge music preamplifier/surround-sound home theater processor with built-in tuner and independent source selection for recording.

It boasts our proprietary built-in Upsampler that converts the sample rates of all incoming digital signals to 192 kHz, the *only* preamplifier/processor to offer upsampling on *all channels* and *all formats,* including decoded Dolby® Digital and DTS® material.

As a high-end whole-home entertainment center the D1 is as much about distributed video as it is about distributed audio—allowing you to select and direct audio and video program material throughout your home. The Main Path provides video and multichannel audio for your main music and home theater room. Zone 2 and Zone 3 paths are independent of the Main Path, and of each other. Selectable by source, they provide video and two-channel audio output with Volume, Bass, Treble, and Balance controls to two completely separate zone outputs. The Record path provides video, two-channel analog-audio and digital-audio record outputs selectable by source. With the addition of an external preamplifier you can even turn the Record Path into a fourth independent audio/video zone.

What ultimately separates the D1 from every other preamplifier/processor on the market, however, is sonic presentation. The D1 is an Anthem™ Statement creation and as such is fundamentally more revealing, displays an extraordinary degree of musical precision, and delivers unheard-of resolution for music and movies. It is truly the ultimate high-end statement—the final word in surround-sound processors.

The Ultimate High-End Statement, Better by Design

- Designed and built in North America by Sonic Frontiers
- 24-Bit/192-kHz Precision Upsampler
  All Digital-to-Analog Conversion (DAC) uses a reconstruction filter as the final step in the conversion process. Without this filter recreating the original signal would not be possible. The side-effect of this filtering, however, is a harshness in the upper frequencies—a result of audible errors in phase- and frequency-response. The best high-end DAC designs go to great lengths to minimize this distortion, with very good results. The D1, however, does even more …

  UPSAMPLING: Increases the sampling rate of the incoming digital signal. This allows the reconstruction filter to operate at a higher frequency, making it less intrusive in the audible bandwidth. While outboard Upsamplers can be purchased as an add-on component, their output is restricted to a maximum of 96 kHz due to the bandwidth limitation of S/PDIF (RCA/Toslink) and AES/EBU digital connections. When outboard Upsamplers are used with SSPs or separate DACs capable of 192 kHz they will, in reality, never operate at more than 96 kHz. In addition, they only operate on 2-channel PCM, not on decoded Dolby® Digital or DTS® program material.

  The D1 includes its own built-in state-of-the-art Upsampler incorporating Analog Devices' AD 1896 and converts the sample rate of all incoming digital signals to 192 kHz. Since this is done inside the D1 there are no digital connections to limit the upsampling frequency. Our D/A converters then operate at their full 192 kHz capability. Unique to the D1, our Upsampler also operates on all decoded Dolby® Digital and DTS® program material.

  OVERSAMPLING: Along with upsampling, the D1's DACs also incorporate 128X oversampling to increase the sample rate to 24.576 MHz, thereby ensuring the best phase- and frequency-response possible.

  This combination of upsampling and oversampling allows the D1 to use much gentler 3rd-order Bessel reconstruction filters. Measurable results are profoundly superior, reflecting exceptionally flat frequency response and THD+N in the upper frequencies up to *twenty times lower* than some of the best high-end outboard DACs.

  Sonic performance is astounding—smoother high-frequency response, superior detail, better image focus—in essence, a far more transparent window on the original performance. While this is enormously beneficial for music it is even more beneficial for home theater. Since the D1's Upsampler operates on *all formats* and *all channels*, the result is a much higher level of transparency for both multichannel music and movies.

- Dual Freescale™ Semiconductor DSP Engines
  – Our own precision Digital Signal Processing design uses two Freescale™ DSP 56367 engines, among the most powerful in the industry. Each is rated at 150-million instructions per second, providing DTS® 96/24, with full bass management capabilities and enough processing power to handle even the most complex program material with matchless precision
- Dual 3Mbit 8ns External Cache Memory
  – Large enough to ensure that the powerful DSP engines never run out of resources, even while running the most complex algorithms
- An impressive resumé of superior-quality component parts including:
  – Renowned audio-grade Wima film capacitors (MKS 2 metallized polyester and MKP 2 metallized polypropylene)
  – Audio-grade operational amplifiers (Burr-Brown™ OPA-2132's)
  – Low-ESR electrolytic OS-CON SVP capacitors
  – Audio-grade Nichicon® Muse® Series UK signal-coupling capacitors with low voltage coefficient
  – High-value (1,000 µF) ADC reference voltage decoupling capacitors for lowest possible THD+N below 1 kHz
- 4-layer, hand-designed motherboard with separate power- and groundplanes
- Independent six-layer DSP, A/D and D/A converter boards
  – A/D and D/A use separate analog and digital planes as well as separate power- and groundplanes for remarkably low noise
- All critical signal paths are surrounded by groundplanes, a painstaking dedicated process
- Massive toroidal power transformers provide separate Main power (rated at 99 VA) and Standby power (rated at 26 VA)
  – Shaped to minimize stray magnetic field radiation and tuned to minimize hum
  – Ultra-fast, soft-recovery, high-efficiency rectifier diodes by General Semiconductor® (UG4D and UG8DT)
  – Power supply filter capacitance of 46,000 µF maintains low ripple voltages with higher loads
  – Ten power supply regulation stages
- Individual low-jitter RS-485 line receivers on all digital inputs
- Unparalleled Analog-to-Digital and Digital-to-Analog conversion essentially eliminates noise in the 20 kHz to 80 kHz frequency band, thanks to the very high quality of our ADC and DAC designs

Analog-to-Digital Conversion (ADC)
– AKM® AK5394A ADCs capable of up to 24-bit x 192 kHz resolution
– Six stereo Crystal® CS3310 analog attenuators arranged in differential mode—one for each channel of the 6-channel input, promoting greater dynamic range and an impressive reduction in distortion

Digital-to-Analog Conversion (DAC)
– AKM® AK4395 converters operate at their full 24-bit x 192-kHz resolution
– Switched-capacitor output filters significantly reduce the DAC's sensitivity to rapid fluctuations in the bit rate during conversion
– The built-in state-of-the-art Upsampler allows the DACs to run at the highest speed (192 kHz) regardless of the incoming digital bitstream, with extremely low background noise up to almost 100 kHz
– High-accuracy clock generator (49.152 MHz, ±0.001%) eliminates the potential for errors in timing, contributing to a significant reduction in the distortion common in D/A conversion

- Fully buffered audio and video inputs for minimum crosstalk
- State-of-the-art video switching circuitry laid out on isolated, independent 2-layer glass-epoxy circuit boards
- Highest-precision thru-hole passive components
- Fine-grain brushed aluminum cover with heavy-gauge 14-awg steel chassis and extruded aluminum handles. (Available in rack-mount version, see dealer for more information)
- Massive mechanical shielding

Especially for the Purist

- Analog-Direct available on all inputs (bypasses A/D's, DSP and D/A's)
- Tone Bypass (removes Bass/Treble from the signal path)
- Balanced 2-channel XLR Digital input (AES/EBU) provides the best digital signal transmission possible
- True-Balanced™ 2-channel Analog input for the best analog signal transmission possible
- True-Balanced™ Analog outputs provide the best noise rejection and purest analog signal transmission possible
- For best possible video performance, on-screen displays can be disabled, completely removing their character generators from the video signal path

- (4) Independent Signal Paths (Main, Zone 2, Zone 3, Record)

INPUTS
- Auto Digital/Analog Input Switching (For Every Source)
- Built-In FM/AM Tuner with Stereo/High-Blend/Mono Setting (Memorized to each FM Preset)
- (7) Coaxial Digital Audio Inputs (Assignable to Multiple Digital Sources)
- (3) Toslink Digital Audio Inputs (Assignable to Multiple Digital Sources)
- (1) AES/EBU Digital Audio Input (Assignable to Multiple Digital Sources)
- Bit Rate/Sample Rate Status Indicator (Displays PCM, Dolby® Digital, DTS®)
- (7) Stereo S/E Analog Audio Inputs (DSP or Direct)
- (1) Stereo True-Balanced™ (XLR) Analog Audio Input (DSP or Direct)
- (1) Six-Channel S/E Audio Input (DSP or Direct)
- Source EQ (Independent for Each Source)
- (4) Component Video Inputs (Assignable to Multiple Sources)
- HDTV Video Switching (All formats up to 1080p)
- (7) S-Video Inputs (Assignable to Multiple Sources)
- (7) Composite Video Inputs (Assignable to Multiple Sources)

MAIN
- (10) True-Balanced™ (XLR) Analog Audio Outputs
- (10) S/E Analog Audio Outputs
- Second Center Channel Output (Parallel–Balanced and S/E)
- Second Subwoofer Output (Parallel–Balanced and S/E)
- (1) Stereo Headphone Output (Independent Volume/Bass/Treble/Balance Controls)
- (2) Component Video Outputs
- (1) S-Video Output
- (1) Composite Video Output
- Mode Presets by Source (Assignable for Each Source)
- Simulcast Video+Audio Sources
- Lip-Sync Delay (For Each Source in half-ms increments)
- Main Sources – Copy to Other Paths
- On-Screen Display (Bypassable)
- On-Screen Setup Menu
- Selectable Setup Menu Background Color (Blue, Black, Magenta)
- Adjustable Mute Level
- Direct Remote Control Codes for Modes

6-CHANNEL ANALOG-DSP (MAIN)
(DVD-Audio/SACD)
- Selectable 44 kHz, 48 kHz, 88 kHz, 96 kHz
- Bass Management
- Time Alignment for Listener Position
- Bass/Treble
- Lip-Sync Delay
- THX®, Dolby® Pro Logic IIx, DTS® Neo:6 Post Processing
- Surrounds can be Rerouted to Rears (5.1 Output)
- Surrounds can be Copied to Rears (7.1 Output)
- 2-Channel Stereo Downmix (For Headphone, Zone 2, Zone 3, Record)

SURROUND MODES (MAIN)
- AnthemLogic–Music™ (No Center Channel)
- AnthemLogic–Cinema™ (Up to 7.1)
- Dolby® Pro Logic IIx Music (with Adjustments)
- Dolby® Pro Logic IIx Movie
- Dolby® Pro Logic IIx Matrix
- Dolby® Pro Logic IIx Game
- Dolby® Pro Logic
- DTS® Neo:6 Music (Center Image Adjustment)
- DTS® Neo:6 Cinema
- All-Channel Stereo (Up to 7.1)
- Mono
- Mono-Academy
- All-Channel Mono
- Individual Speaker Levels Memorized for Each Mode

5.1/6.1 MODES (MAIN)
- Dolby® Digital 5.1
- Dolby® Digital EX™
- DTS® 5.1
- DTS® ES Matrix
- DTS® ES Discrete
- DTS® 96/24 with full bass management
- DTS® 2-Channel Stereo Downmix (For Headphone, Zone 2, Zone 3, Record)
- Dynamics Adjustment (Dolby® Digital and DTS®)
- Dynamics Reset to Normal at Power Off
- Individual Speaker Levels Memorized for Each Mode

THX® MODES (MAIN)
- THX® Cinema
- THX® Ultra2™ Cinema
- THX® MusicMode
- THX® Surround EX™
- THX® Games Mode
- THX® ReEQ: On/Off (Can be applied even when THX® is turned Off)

BASS MANAGEMENT (MAIN)
- Independent Cinema and Music Speaker Configurations (Assignable to Each Source)
- Auto-LFE Option (For Cinema or Music Configuration)
- Dipole Setting for Surround/Rear
- Center Channel EQ
- Room Resonance Filter
- THX® Boundary Gain Compensation
- Super Subwoofer Setting (Subwoofer Operates when Fronts are Set to Large)
- Cinema and Music Configurations each include:
  - Independent Crossovers by Speaker Group (5-Hz Steps)
  - Independent Crossover for Subwoofer (5-Hz Steps)
  - Subwoofer Variable Phase
  - Subwoofer Polarity
  - LFE Crossover Bypass

ZONE 2
- (1) Stereo S/E Analog Audio Output
- (1) Stereo True-Balanced™ (XLR) Audio Output
- Variable or Fixed Volume Level Setting
- Adjustable Maximum Volume Setting
- Bass, Treble, Balance Controls
- (1) S-Video Output
- (1) Composite Video Output
- Simultaneous S-Video and Composite Outputs
- Simulcast Video+Audio Sources
- On-Screen Display (Bypassable)
- On-Screen Setup Menu

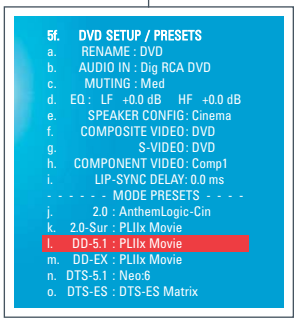
ZONE 3
- (1) Stereo S/E Analog Audio Output
- Variable or Fixed Volume Level Setting
- Adjustable Maximum Volume Setting
- Bass, Treble, Balance Controls
- (1) S-Video Output
- (1) Composite Video Output
- Simultaneous S-Video and Composite Outputs
- Simulcast Video+Audio Sources

RECORD
- Tape Record Out: (1) Stereo S/E, (1) S-Video, (1) Composite
- VCR Record Out: (1) Stereo S/E, (1) S-Video, (1) Composite
- (2) Coaxial Digital Record Outputs (Independent)
- Analog-In to Digital-Out
  (Selectable 16-bit/44 kHz, 16-bit/48 kHz,
  24-bit/88 kHz, 24-bit/96 kHz)
- Dithered Output for 16-bit Recording

CUSTOM INSTALLATION
- (2) 50-mA Trigger Outputs
- (1) 200-mA Trigger Output
- (3) Powered IR Receivers
- (2) IR Emitters
- RS-232 Communication/Internet Upgradeability
- RS-232 Crestron® and AMX™ Compatible
- IEEE 1394 (Firewire®) Provision
- Front-Panel Lockout Option
- User Settings Save Function
- Installer Settings Save Function
- Setup Menu Lockout
- Wake-Up/Shut-Off Timers (Main, Zone 2, Zone 3)
- On/Off Skip Timers (Main, Zone 2, Zone 3)
- Sleep Timers (Main, Zone 2, Zone 3)

UPGRADEABILITY
- Hardware Upgradeable
- Easy (no charge) Website Software Upgradeability

ADDITIONAL
- Universal Learning Back-Lit Remote Control
- Power Failure / Overheating Text Warning
- 5-Year Warranty (1 Year on Remote Control)


5f. DVD SETUP / PRESETS
a. RENAME : DVD
b. AUDIO IN : Dig RCA DVD
c. MUTING : Med
d. EQ : LF +0.0 dB HF +0.0 dB
e. SPEAKER CONFIG: Cinema
f. COMPOSITE VIDEO: DVD
g. S-VIDEO: DVD
h. COMPONENT VIDEO: Comp1
i. LIP-SYNC DELAY: 0.0 ms
- - - - - - MODE PRESETS - - - -
j. 2.0 : AnthemLogic-Cin
k. 2.0-Sur : PLIIx Movie
l. DD-5.1 : PLIIx Movie
m. DD-EX : PLIIx Movie
n. DTS-5.1 : Neo:6
o. DTS-ES : DTS-ES Matrix

Auto-Format Detection, Listening with Memory

Dolby® Digital, DTS®, PCM Stereo? The D1 makes it easy. For any digital input it selects the correct format automatically! Or take any 2-channel stereo source, analog or digital, and create the listening experience you want—from Dolby® Pro Logic, Dolby® Pro Logic IIx, DTS® Neo:6, THX®, to one of our own proprietary modes that provide up to 7.1 channels of sound:

- **AnthemLogic–Music™** is a minimalist design that enhances the stereo listening experience without detracting from the stereo soundstage. It automatically provides up to 6.1 channels of output, depending on your speaker configuration. No delay effects are used, nor does it use the center channel, thereby ensuring the integrity of the music's stereo soundstage.
- **AnthemLogic–Cinema™** provides a large, enveloping and dynamic movie listening experience that makes 2-channel movies, TV and satellite sound more like what is experienced in a full-impact movie theater. No delay effects are used. It automatically provides up to 7.1 channels of output, depending on your speaker configuration.

Surround listening never sounded so good! And to make it all easy to use, the D1 has three automatic memory functions:

1. **Presets:** For each source you can set Mode Presets for each of the following formats: 2-Channel, Dolby® Digital 2.0, Dolby® Digital 5.1, DTS® 5.1, Dolby® Digital EX™ and DTS® ES. Whenever you select a source, its Mode Presets will be automatically recalled and applied to the format of the material being played.
2. **Last Used:** For each source you can also set any Mode Preset to Last Used. The D1 will then automatically remember the surround mode and THX® mode last chosen for each source so that you won't have to change modes as you change sources.
3. **On-the-Fly Level Settings:** The D1 also automatically remembers on-the-fly settings for Speaker Level, Bass, Treble and Subwoofer Level and does so separately for Stereo and each 2-Channel or 5.1 Surround Mode, so you won't have to change settings as the format changes. (This does not apply to THX® which requires settings to be at "0" when THX® is initially turned On. Adjustments can then be done afterwards.)

These unique memory functions are very useful in a number of ways. Here is a small example of what you can do with the D1's powerful Mode Preset capability by setting each source as follows:

– **CD:** Preset the 2-Channel mode to AnthemLogic–Music™
– **VCR:** Preset the 2-Channel mode to AnthemLogic–Cinema™
– **Satellite:** Preset the 2-Channel mode to AnthemLogic–Cinema™ and Dolby® Digital 5.1 to THX® Ultra2™ Cinema
– **DVD:** Preset Dolby® Digital 2.0 (when Surround-flagged) to Pro Logic IIx Movie, Dolby® Digital 5.1 and DTS® 5.1 to THX® Ultra2™ Cinema
– **6-Ch S/E:** Preset 6-Channel to THX® MusicMode

Now sit back and relax; whenever you or anyone else in your family switches from source to source, or program to program, each mode preset is automatically recalled. No more errors in selecting the correct mode. Press CD and the mode will be AnthemLogic–Music™. Press VCR and the mode will change to AnthemLogic–Cinema™. Switch to Satellite, stereo programs will be heard in Anthem Logic–Cinema™, and when the format changes to Dolby® Digital 5.1, the mode will automatically change to THX® Ultra2™ Cinema. In the same way, DVD and 6-Channel S/E will change to the mode presets you have set. If you would rather not use presets, the remarkable D1 allows for that as well. Simply set the Mode Preset to Last Used and the last mode chosen for each source will be remembered so that you won't have to change modes when you change sources.

Remembering On-the-Fly Level Settings is also very useful. For example, if you use a DVD player for both music and movies you can set the subwoofer for a DVD 5.1 movie to +3.0 dB for more bass impact, but for a stereo CD reduce it to -3.0 dB for a better music balance. You may want to boost center channel treble for VCR movies playing in AnthemLogic–Cinema™, but not for DVD 5.1 movies. Or, you may want different surround or rear levels for a Dolby® Digital EX™ DVD vs. a Satellite movie in AnthemLogic–Cinema™. The D1 automatically remembers individual level settings for each mode so you don't have to adjust them every time the format changes. Finally, to allow for LFE differences with DVD 5.1 formats, the D1 even remembers LFE levels for Dolby® Digital and DTS® independently.

With its powerful memory capability it has never been easier to enjoy the exceptional multi-channel music and home theater sound that the D1 provides.

5f. DVD SETUP / PRESETS
a. RENAME : DVD
b. AUDIO IN : Dig RCA DVD
c. MUTING : Med
d. EQ : LF +0.0 dB HF +0.0 dB
e. SPEAKER CONFIG: Cinema
f. COMPOSITE VIDEO: DVD
g. S-VIDEO: DVD
h. COMPONENT VIDEO: Comp1
i. LIP-SYNC DELAY: 0.0 ms
- - - - - - MODE PRESETS - - - -
j. 2.0 : AnthemLogic-Cin
k. 2.0-Sur : PLIIx Movie
l. DD-5.1 : PLIIx Movie
m. DD-EX : PLIIx Movie
n. DTS-5.1 : Neo:6
o. DTS-ES : DTS-ES Matrix

Selectable Audio-In Formats

The remarkable D1 offers four Audio-In Format options for each Main-Path Source (as applicable):

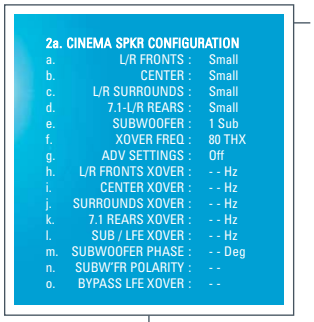
1. **Digital**
   The mandatory choice for any component where Dolby® Digital or DTS® decoding is required (i.e. DVD-Video). Set CD to Digital and upgrade the performance of your CD player by connecting its digital output to the D1, thereby using the D1's superior high-end DACs (digital-to-analog converters).
2. **Analog-Direct** (Bypasses A/D's, DSP and D/A's)
   Analog-Direct provides a purist audiophile input that bypasses Bass Management, Bass/Treble Controls and Mode Selections.
3. **Analog-DSP** (Enables A/D's, DSP and D/A's)
   Analog-DSP provides true high-end sound while engaging all Bass Management, Bass/Treble controls and Mode selections.
4. **Auto-Digital** (Enables A/D's, DSP and D/A's)
   The D1 automatically switches between Digital and Analog-DSP. This feature is especially useful with cable boxes where some channels are broadcast digitally, while others are broadcast in analog. As you change channels, the D1 automatically switches to the input required.

THX® Ultra 2™ Suite

The THX® certified D1 includes all THX® modes which can be applied to formats as follows:

- **THX® Cinema** – Provides up to 7.1 output with Dolby® Pro Logic, Pro Logic IIx Movie, DTS® Neo:6 Cinema, Dolby® Digital 5.1, DTS® 5.1
- **THX® Ultra2™ Cinema** – Provides 7.1 output with Dolby® Digital 5.1 or DTS® 5.1 Movies
- **THX® MusicMode** – Provides 7.1 output with 6-Channel Music Sources—DVD-Audio, SACD, Dolby® Digital 5.1, DTS® 5.1
- **THX® Surround EX™** – 6.1 output for use with Dolby® Digital EX™
- **THX® Games Mode** – Provides 7.1 output for use with Dolby® Digital 5.1 and DTS® 5.1 game sources. If engaged with 2-channel input, source is automatically converted to 5.1 via Pro Logic IIx Games mode.

The D1 also includes THX® Setup Menu options to optimize THX® operation for the spacing of your Rear Speakers and Boundary Gain Compensation for your subwoofer, if required.


2a. CINEMA SPKR CONFIGURATION
a. L/R FRONTS : Small
b. CENTER : Small
c. L/R SURROUNDS : Small
d. 7.1-L/R REARS : Small
e. SUBWOOFER : 1 Sub
f. XOVER FREQ : 80 THX
g. ADV SETTINGS : Off
h. L/R FRONTS XOVER : - - Hz
i. CENTER XOVER : - - Hz
j. SURROUNDS XOVER : - - Hz
k. 7.1 REARS XOVER : - - Hz
l. SUB / LFE XOVER : - - Hz
m. SUBWOOFER PHASE : - - Deg
n. SUBW'FR POLARITY : - -
o. BYPASS LFE XOVER : - -

Bass Management, Plus!

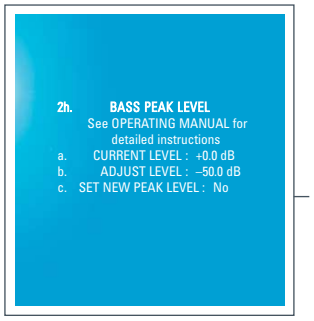
For each Speaker Configuration, you can select which speakers you have in your system (or which ones you want to use), as well as their size—large or small.

The global crossover frequency determines the low-frequency cut-off for all speakers set to small and the high-frequency cut-off for the subwoofer. You can also set the subwoofer to Super which will engage your subwoofer, even if you have the front speakers set to large. This is particularly useful when listening to 2-channel music with large fronts, where the Super setting then allows your subwoofer to reproduce all of the glorious deep bass in your favorite music recordings.

Advanced Settings for Bass Management

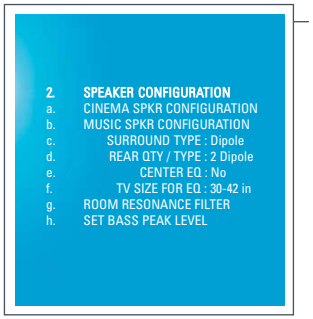
Each Speaker Configuration also includes Advanced Settings which offer a number of fine-tuning capabilities. You can set crossover points independently for each speaker group, in 5-Hz increments from 25 Hz to 160 Hz, to better optimize their low-frequency cut-off. You can also independently set the cut-off frequency for the subwoofer; and unique to the D1, make precision adjustments to the Phase and Polarity of the subwoofer. This offers greater flexibility in dealing with room bass anomalies and allows you to achieve a seamless blend between the subwoofer and the other speakers in your system, to provide the most accurate and extended bass possible.

In addition, the D1's Bypass LFE Crossover allows you to recover LFE information that might otherwise be lost if you choose to use a particularly low SUB/LFE crossover setting.


2h. BASS PEAK LEVEL
See OPERATING MANUAL for detailed instructions
a. CURRENT LEVEL : +0.0 dB
b. ADJUST LEVEL : –50.0 dB
c. SET NEW PEAK LEVEL : No

Bass Peak Level

The loudest part of a movie soundtrack is often LFE bass. The Bass Peak Level Manager "looks ahead" at the bass signal and reduces the risk of subwoofer/speaker overload by tailoring bass output to match their power handling capabilities.

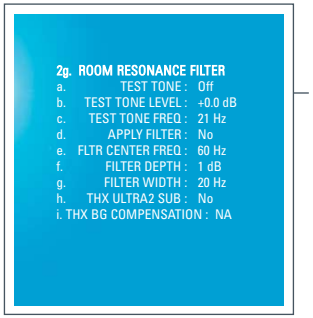

2. SPEAKER CONFIGURATION
a. CINEMA SPKR CONFIGURATION
b. MUSIC SPKR CONFIGURATION
c. SURROUND TYPE : Dipole
d. REAR QTY / TYPE : 2 Dipole
e. CENTER EQ : No
f. TV SIZE FOR EQ : 30-42 in
g. ROOM RESONANCE FILTER
h. SET BASS PEAK LEVEL

Music and Cinema Speaker Configurations

Two independent speaker configurations are provided for greater flexibility in bass management:

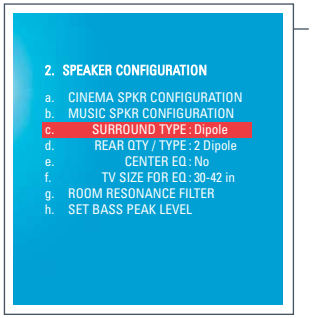
- **Cinema Speaker Configuration** is intended for use with movies that contain LFE information (5.1/6.1-channel program material).
- **Music Speaker Configuration** is optional and can be used to tailor your system for music (and movies that do not contain an LFE track).

These configurations can be assigned separately to each source. Our unique Auto-LFE option automatically switches speaker configurations based on the presence or absence of LFE information. This is useful when using the same player for DVDs and CDs operating into the same source. DVD movies with LFE will engage the Cinema configuration, while CDs with no LFE will engage the Music configuration.


2g. ROOM RESONANCE FILTER
a. TEST TONE : Off
b. TEST TONE LEVEL : +0.0 dB
c. TEST TONE FREQ : 21 Hz
d. APPLY FILTER : No
e. FLTR CENTER FREQ : 60 Hz
f. FILTER DEPTH : 1 dB
g. FILTER WIDTH : 20 Hz
h. THX ULTRA2 SUB : No
i. THX BG COMPENSATION : NA

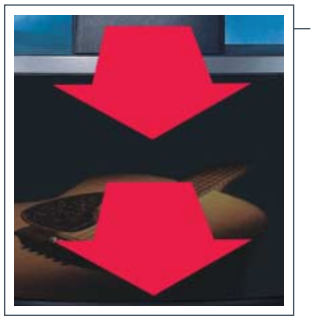
Room Resonance Filter

Rooms often have a prominent resonance peak which can make bass from even the finest subwoofer sound boomy. Using our proprietary low-frequency test tones, our Room Resonance Filter allows you to identify and effectively remove this prominent peak and gain a major improvement in bass detail and definition.


2. SPEAKER CONFIGURATION
a. CINEMA SPKR CONFIGURATION
b. MUSIC SPKR CONFIGURATION
c. SURROUND TYPE : Dipole
d. REAR QTY / TYPE : 2 Dipole
e. CENTER EQ : No
f. TV SIZE FOR EQ : 30-42 in
g. ROOM RESONANCE FILTER
h. SET BASS PEAK LEVEL

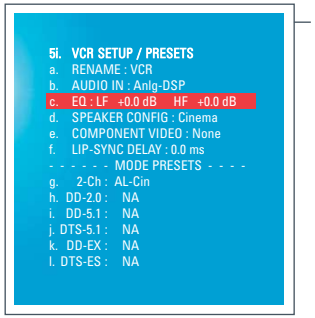
Dipole Surrounds/Rears

Surround and rear settings apply to both speaker configurations. You can select direct or dipole—which then automatically presets correct listener position settings for the reverberant soundfield provided by dipole speakers. You can also reconfigure surround and rear-channel information in a 7.1 system. With 5.1 output, surrounds can be copied to rear speakers. For a 6-channel music program, you can have surrounds rerouted to the rears, while for a 5.1 movie program the surround channel will still be routed to the surround speakers.



Center-Channel Equalization

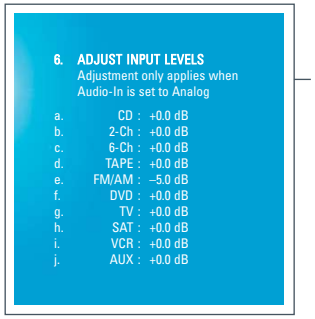
When you place a center-channel speaker on top of your TV the front of the TV screen becomes an extension of the speaker baffle, essentially "changing" its exterior shape. This can reduce dialog intelligibility. The D1 addresses this problem with its unique Center-Channel Equalization feature. Just select your TV's screen size and the D1's proprietary algorithm modifies the center-channel's frequency response curve to provide the clearest sound possible.


5i. VCR SETUP / PRESETS
a. RENAME : VCR
b. AUDIO IN : Anlg-DSP
c. EQ : LF +0.0 dB HF +0.0 dB
d. SPEAKER CONFIG : Cinema
e. COMPONENT VIDEO : None
f. LIP-SYNC DELAY : 0.0 ms
- - - - - - MODE PRESETS - - - -
g. 2-Ch : AL-Cin
h. DD-2.0 : NA
i. DD-5.1 : NA
j. DTS-5.1 : NA
k. DD-EX : NA
l. DTS-ES : NA

Source Equalization

For each source, you can change the name and (where applicable) assign digital audio and component video inputs, assign speaker configuration, set Lip-Sync Delay, select mode presets and adjust equalization.

Sources do not all have the same frequency balance. Your favorite FM stations may *boost* their high frequencies to sound more prominent when you scan FM. Or perhaps your VCR's output sounds dull, making it hard to understand. The D1 has the perfect solution—Source Equalization. This allows you to apply independent low-frequency and high-frequency settings for each source. And you can still use bass/treble controls to make on-the-fly adjustments that may be required for any specific program.


6. ADJUST INPUT LEVELS
Adjustment only applies when Audio-In is set to Analog
a. CD : +0.0 dB
b. 2-Ch : +0.0 dB
c. 6-Ch : +0.0 dB
d. TAPE : +0.0 dB
e. FM/AM : –5.0 dB
f. DVD : +0.0 dB
g. TV : +0.0 dB
h. SAT : +0.0 dB
i. VCR : +0.0 dB
j. AUX : +0.0 dB

Matching Volume Differences

Ever notice how some analog components (FM/AM, VCR, Tape, etc.) play louder than others with the volume control at the same setting? The D1 lets you adjust for these differences easily. Built-in VU meters provide a visual indicator of the level right up to overload. Now all of your analog components can play at a similar level, minimizing those annoying level differences when switching from one source to another.

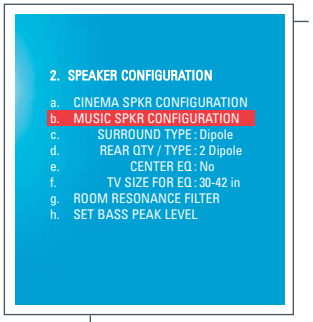
Lip-Sync For Each Source

Thinking of adding a video line doubler/quadrupler or scaler to improve video quality? These can provide terrific improvement, but the added time it takes to process the video signal results in a slight, but noticeable delay—the video will no longer be synchronized with the audio signal. The D1's Lip-Sync Delay corrects for this problem. For each source component, the complete audio signal can be delayed, independently, in half-millisecond increments from 0.5 to 170 milliseconds (to 85 milliseconds in the AVM 30) to resynchronize the audio signal with the video signal, ensuring a perfect match. HDTV and satellite broadcasts can also be out of sync, so the D1 also allows for easy, on-the-fly adjustments without having to enter the Setup Menu.

Simulcasting

Want to watch the ball game but listen to your favorite radio announcers? Now you can! The D1 lets you replace the audio for any selected video source.

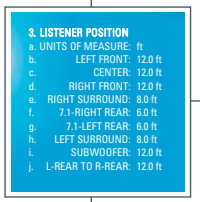
For ease of operation, simulcast video for the 6-channel audio source is default-set for DVD (which can be overridden). This allows the video from a DVD-Audio or SACD disc to be automatically seen when listening to a DVD-Audio or SACD disc through the 6-channel source.

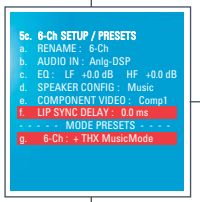

2. SPEAKER CONFIGURATION
a. CINEMA SPKR CONFIGURATION
b. MUSIC SPKR CONFIGURATION
c. SURROUND TYPE : Dipole
d. REAR QTY / TYPE : 2 Dipole
e. CENTER EQ : No
f. TV SIZE FOR EQ : 30-42 in
g. ROOM RESONANCE FILTER
h. SET BASS PEAK LEVEL

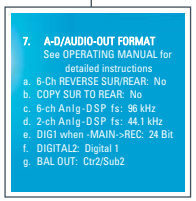
Comprehensive Sound Management for DVD-Audio and SACD

Surround-sound processors now generally have a 6-Channel Direct Analog input for multichannel DVD-Audio and SACD music programs. With other SSPs, however, this input is only an analog pass-through, which means no sound management is performed. That must be left to the player itself, which is problematic. DVD-Audio and SACD players are woefully inadequate when it comes to sound management. Some may have bass management, but even then they typically only have a single fixed crossover point.

The D1 is unique in that its analog-to-digital converters operate on all channels of the DVD-Audio / SACD 6-Channel input. With the 6-Channel Source set to Analog-DSP (factory default), the D1 provides comprehensive sound management which includes:


3. LISTENER POSITION
a. UNITS OF MEASURE: ft
b. LEFT FRONT: 12.0 ft
c. CENTER: 12.0 ft
d. RIGHT FRONT: 12.0 ft
e. RIGHT SURROUND: 8.0 ft
f. 7.1-RIGHT REAR: 6.0 ft
g. 7.1-LEFT REAR: 6.0 ft
h. LEFT SURROUND: 8.0 ft
i. SUBWOOFER: 12.0 ft
j. L-REAR TO R-REAR: 12.0 ft


5c. 6-Ch SETUP / PRESETS
a. RENAME : 6-Ch
b. AUDIO IN : Anlg-DSP
c. EQ : LF +0.0 dB HF +0.0 dB
d. SPEAKER CONFIG : Music
e. COMPONENT VIDEO : Comp1
f. LIP SYNC DELAY : 0.0 ms
- - - - - MODE PRESETS - - - -
g. 6-Ch : + THX MusicMode

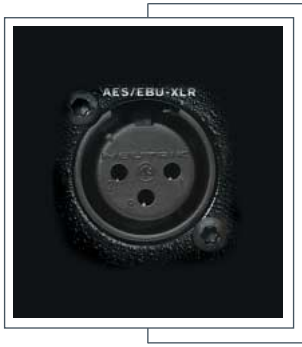

7. A-D/AUDIO-OUT FORMAT
See OPERATING MANUAL for detailed instructions
a. 6-Ch REVERSE SUR/REAR: No
b. COPY SUR TO REAR: No
c. 6-ch Anlg-DSP fs: 96 kHz
d. 2-ch Anlg-DSP fs: 44.1 kHz
e. DIG1 when -MAIN->REC: 24 Bit
f. DIGITAL2: Digital 1
g. BAL OUT: Ctr2/Sub2

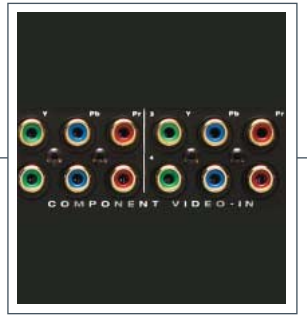
- **Sophisticated Bass Management** (plus Advanced Settings)
- **Time Alignment for Listener Position**
- **Bass and Treble Controls**
- **Lip-Sync Delay**
- **THX®, Dolby® Pro Logic IIx and DTS® Neo:6 Post Processing**
- **2-Channel Stereo Downmix** for listening with headphones or listening in other zones.

In Analog-DSP, the sound management for the 6-Channel Source is performed at 24-bit x 96 kHz (factory default) to maintain the high level of resolution provided by DVD-Audio / SACD. This can also be set to 16-bit x 44.1 kHz, 16-bit x 48 kHz or 24-bit x 88.2 kHz, for compatibility with CD burners and other digital equipment. With the 5.1 output, surround-channel information can be optionally copied to rears. With the 6-channel input, surround-channel information can be optionally rerouted to rears.

FM/AM Tuner

Our tuner provides superb high-end sound and features 18 FM and 6 AM station presets, selectable Stereo, High-Blend and Mono modes. For added convenience these modes are memorized to the presets—simply set it once to enjoy the best sound all of the time. As with other sources, the tuner can be directed to all four Paths so you can record, or listen to your favorite radio station anywhere in your home. A Texas Instruments™ TLC072 MOSFET input type operational amplifier is used to reduce DC offsets for even greater signal precision.





Greater Functionality

- Seven assignable RCA Digital inputs
- Three assignable Toslink inputs
- Assignable AES/EBU Digital input
- Four assignable Component Video inputs
- Seven assignable S-Video inputs
- Seven assignable Composite Video inputs
- Digital audio inputs can be assigned to any number of digital sources
- Any video input can be assigned to any number of sources
- True Balanced™ (XLR) 2-channel Analog input, selectable for Analog-Direct or Analog-DSP
- Two Digital Record outputs (RCA-S/PDIF) which operate as follows:

Digital-1: Any Digital source selected in the Record Path is directed to this output. The digital signal will simply pass through, even if it is Dolby® Digital- or DTS®-encoded. As well, any Analog source set to Analog-DSP and selected in Main is converted to digital and can be directed to this output—selectable to either 16-bit x 44.1 kHz, 16-bit x 48 kHz, 24-bit x 88.2 kHz or 24-bit x 96 kHz. If the source is set to Analog-Direct there is no digital output.

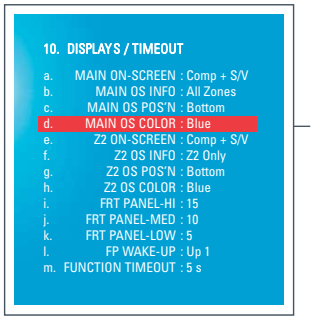
Digital-2: This output can be set to copy the Digital-1 output, or it can be assigned to any source set to Digital, where it will simply pass the digital input signal through to this output.

Highest-Quality Video Switching, Highest-Definition HDTV Ready

When it comes to video, incredible is putting it mildly! The remarkable D1 boasts the highest quality video circuitry, allowing you to switch all video sources without degradation, right up to the very highest High-Definition TV (HDTV) progressive video standard of 1080p. In fact, with its buffered video design, when running longer cables, routing video through the D1 for switching can actually *improve* video quality.

Progressive scan DVD-players (480p) and HDTV (720p or 1080i) require Component Video connectors (Y/Pr/Pb). Running these video signals through an inferior quality switcher can cause loss of picture detail. To prevent picture degradation, the D1 provides Component Video switching, with a bandwidth of 110 MHz for the "Y" connection (Pb and Pr require only half the bandwidth). Our specification covers the *entire* video circuit —from input to output.

Be wary of some products claiming HDTV video capability. Sometimes manufacturers reveal only the bandwidth of the switcher, they do not give specifications for the entire video circuit. The D1 is fully HDTV 1080p capable. It uses the highest quality video devices (not just ones that might "get by") in addition to an extremely well-designed video circuit and layout.


10. DISPLAYS / TIMEOUT
a. MAIN ON-SCREEN : Comp + S/V
b. MAIN OS INFO : All Zones
c. MAIN OS POS'N : Bottom
d. MAIN OS COLOR : Blue
e. Z2 ON-SCREEN : Comp + S/V
f. Z2 OS INFO : Z2 Only
g. Z2 OS POS'N : Bottom
h. Z2 OS COLOR : Blue
i. FRT PANEL-HI : 15
j. FRT PANEL-MED : 10
k. FRT PANEL-LOW : 5
l. FP WAKE-UP : Up 1
m. FUNCTION TIMEOUT : 5 s

Selectable Background Color

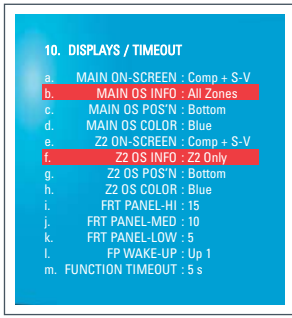
In keeping with the D1's easy-to-use plug 'n' play philosophy, the Setup Menu's background color can be changed from Blue to Magenta or Black to allow for correct "synching" with various video monitors or projectors.

Ten Outputs – 7.1 Plus Second Center Channel and Subwoofer
(RCA and Balanced XLR)
The D1 provides incredibly musical, spacious and accurate surround sound! In some installations you may want to add a second center-channel speaker—either above and below, or on either side of your video monitor. You may also want to add a second subwoofer. The D1 makes it easy with additional output connections already built in—both for RCA and Balanced XLR.

If you want to use both sets of outputs (Balanced XLR and RCA) at the same time, you can. Each set of outputs operates concurrently—the Balanced XLR outputs can be connected to a system in one room, and the RCA outputs connected to a second system in another. All you have to do is switch on the power amplifier in the room in which you want to hear home theater.

Four Paths: Whole Home Entertainment Made Easy!
Have you ever wanted your audio/video system to do multiple things at once? For instance … watch a movie in your main family/home theater room while someone in another room listens to a CD, and someone outdoors listens to FM radio. At the same time, someone else can record a satellite broadcast. Now you can! It's a breeze with our unique Path feature. Just press the Path button to choose "where," then press the source button to select "what" you want to see or hear in that path.

The Main Path provides video and multichannel audio for music and home theater. Zone 2 and Zone 3 paths provide independent video and 2-channel audio output with volume, bass, treble and balance controls which operate independently of the Main Path, and each other. Finally, the Record Path provides video, 2-channel analog-audio, and digital-audio record outputs selectable by source. Alternatively, with the addition of an external preamplifier or receiver, the Record Path can be used as a fourth independent audio/video zone.

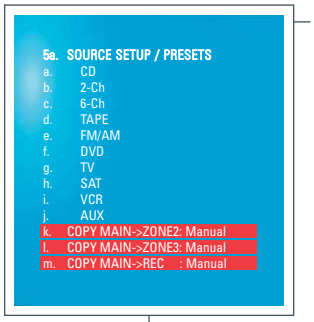

10. DISPLAYS / TIMEOUT
a. MAIN ON-SCREEN : Comp + S-V
b. MAIN OS INFO : All Zones
c. MAIN OS POS'N : Bottom
d. MAIN OS COLOR : Blue
e. Z2 ON-SCREEN : Comp + S-V
f. Z2 OS INFO : Z2 Only
g. Z2 OS POS'N : Bottom
h. Z2 OS COLOR : Blue
i. FRT PANEL-HI : 15
j. FRT PANEL-MED : 10
k. FRT PANEL-LOW : 5
l. FP WAKE-UP : Up 1
m. FUNCTION TIMEOUT : 5 s

Extensive Video Outputs Multiple On-Screen Displays
Two component outputs, five S-Video outputs and five Composite (RCA) outputs give you the flexibility to connect multiple video displays/components throughout your home. Even the Tape Record output has S-Video and Composite Video outputs to allow recording onto a second VCR.

Accessing the Setup Menu has never been easier with the On-Screen Setup Menu which is available simultaneously in both S-Video and Composite formats. For ease of operation, the On-Screen displays can be operated in both Main and Zone 2 paths, making on-the-fly changes easy.

Balanced Outputs for Zone 2
The second center/second subwoofer True Balanced™ XLR outputs can alternatively be assigned to Zone 2 Left/Right. This is particularly useful in maintaining low noise when running longer cable lengths to Zone 2. Even when these outputs are assigned to Zone 2, you can still connect a second center/second subwoofer by using their respective RCA outputs.

Audiophile CD Recordings
Sources set to Analog-DSP can be copied from Main to Record where the D1's superior high-end built-in analog-to-digital converters will provide ultra-low distortion and an extraordinarily quiet digital record output (-100 dB) —much better than typical computer sound cards. Selectable to 16-bit x 44.1 kHz, 16-bit x 48 kHz, 24-bit x 88.2 kHz or 24-bit x 96 kHz. When in 16-bit mode, the D1 adds dither to maximize low-level signal resolution. With a CD-R burner you can use external phono stages, tape decks or the internal tuner of the D1 to record audiophile-quality CDs.



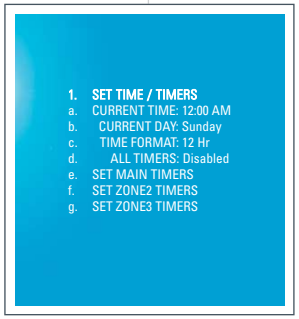
Our Unique Copy Feature

Virtually all SSPs with a second zone only provide 2-channel analog sources in that second zone. While the D1 will also do this, it has another unique capability. It allows you to copy the selected Main digital source to Zone 2, Zone 3, and Record so that you can listen to the Main digital source throughout your home. The copy feature can be set manually via the front panel each time it is required, or permanently in the Setup Menu. When set permanently, copy mode will remain in effect even if Main power is turned off. But we didn't stop there.

The D1 also provides a 2-channel stereo downmix from Dolby® Digital 5.1 and DTS® 5.1 program material which can be copied to Zone 2, Zone 3, or Record. In the case of DTS® 5.1, no stereo downmix is provided by the DVD-player. The D1, however, takes care of this, with its own 2-channel stereo downmix, allowing DTS® 5.1 program material to be heard in stereo in other zones. Simply select DVD source (DD® 5.1/DTS® 5.1) in Main, and then copy it to Zone 2, Zone 3, or Record.

We've even provided a 2-channel downmix from the 6-channel analog DVD-Audio/SACD source which can then be directed to other paths—complete with its video. Select 6-Channel Source in Main and then copy it to Zone 2, Zone 3, or Record.

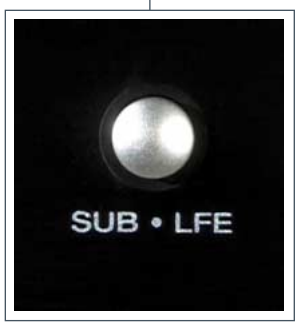
This same 2-channel downmix automatically operates for headphones. Select the 6-Channel or DVD source in Main, insert the headphone jack and you'll hear the stereo downmix.


1. SET TIME / TIMERS
a. CURRENT TIME: 12:00 AM
b. CURRENT DAY: Sunday
c. TIME FORMAT: 12 Hr
d. ALL TIMERS: Disabled
e. SET MAIN TIMERS
f. SET ZONE2 TIMERS
g. SET ZONE3 TIMERS

Timers

Main, Zone 2 and Zone 3 each have their own sleep timer, plus two programmable on/off timers. The sleep timers for Main, Zone 2 and Zone 3 operate independently.

The programmable timers can be set to operate for weekdays, weekends, or both. You can also pre-select the source for any timer when it turns on. For example, you can set Main to turn on to TV at 7:00 a.m. and the kids can watch cartoons while you sleep. Set Zone 2 to turn on at 7:30 a.m. to CD and wake up to your favorite music. Set Zone 3 to turn on at 8:00 a.m. to a selected FM station and listen to the morning news while you have breakfast. Then set Zone 2 and Zone 3 to turn off at 9:00 a.m. after you leave for work, and turn on again at 6:00 p.m. to CD so your favorite music can be playing when you get home. And finally, set each Zone to turn off at midnight. Dashes in hour column of timer menus allow specific timers to be skipped—they can be set to only turn on, or only turn off.



Late-Night Operation

A number of late-night features keep your sleeping family members (and your neighbors) in mind. Dynamics can be reduced on Dolby® Digital and DTS® movies encoded with dynamic scaling, to limit the impact of louder sounds like cymbal crashes and explosions, while still hearing the faintest whisper of dialog. The independent Low Frequency Effects (LFE) control lets you reduce the level of the '.1' LFE channel, which often contains substantial bass. The front-panel display can be dimmed to be less obtrusive, and it will still brighten momentarily whenever you make adjustments.

Headphone Preamplifier

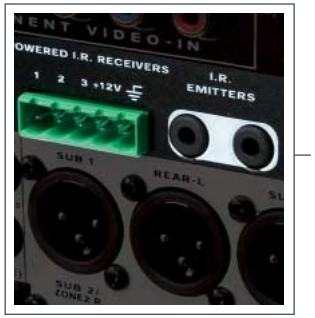
The superb private listening provided by the D1's built-in headphone preamplifier is a result of our high-quality design and use of the finest quality discrete component parts. Power supply rails of ±15 VDC in concert with the Motorola® MC33078 operational-amp used in the gain stage accommodate an extensive volume range, particularly useful with high-impedance headphones. Renowned Wima MKS 2 metallized polyester film capacitors ensure ultra-low distortion at higher frequencies.

With a dedicated fully discrete output stage our headphone preamplifier also features separate Volume, Bass, Treble and Balance controls, allowing you to make changes independently of your Main room settings. You can also choose to have your headphones operate along with Main speakers, or turn Main speakers off when the headphone plug is inserted.

Triggers

Programmable trigger outputs can turn components that have a trigger input, on or off. Three triggers provide tremendous flexibility. Set Trigger 1 to Main power-on, connect it to the trigger input of your amplifier, press the D1's Main power button—your amplifier will turn on and off in tandem.

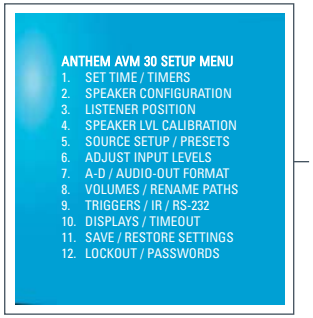
Use triggers to automate as much as you like. Turn your entire system on or off with one button. Used with timers, triggers offer you even more versatility. For example, set timers and triggers so that at 7:00 a.m. Main turns on to DVD and triggers-on your TV, Amplifier and DVD Player—even turn lights on or off; and your five-year-old can watch a movie on Saturday morning and leave you time to sleep in.



Two 12-volt triggers operate at 50 mA and the third at 200 mA. Unique to the D1, this third, higher-current trigger saves hundreds of dollars on a separate outboard trigger, which would otherwise be required to operate motorized products such as video projection screens.

Three Powered IR Inputs, Two IR Emitter Outputs

All three infrared inputs can be powered from the D1's built-in 12-V power supply, eliminating the need for costly external power supplies required to power IR repeaters. As well, two rear-panel infrared emitter outputs make it easy to remote control your source components (CD, DVD) from another room.


ANTHEM AVM 30 SETUP MENU
1. SET TIME / TIMERS
2. SPEAKER CONFIGURATION
3. LISTENER POSITION
4. SPEAKER LVL CALIBRATION
5. SOURCE SETUP / PRESETS
6. ADJUST INPUT LEVELS
7. A-D / AUDIO-OUT FORMAT
8. VOLUMES / RENAME PATHS
9. TRIGGERS / IR / RS-232
10. DISPLAYS / TIMEOUT
11. SAVE / RESTORE SETTINGS
12. LOCKOUT / PASSWORDS

Setup that's Intuitive, Easy, and also "Remembers"

Our intuitive setup menu is easy to navigate, and our "what-you-see-is-what-you-get" (WYSIWYG) front-panel buttons and display readouts make the D1 a snap to operate. You can even rename sources and paths to make them easier for your whole family to use. For example, change the "AUX" source to read "Game" so your kids can easily locate the source input for their video games. Change the Zone 2 path to "Den" to easily locate the zone you are operating.

Once completed, settings can be saved and even password-protected. Two saved files are included: one for User and one for Installer. Now, if you ever need to revert to your own or your installer's settings, simply restore the saved file.

Let's say someone changed a setup menu setting, it's Saturday night and now you can't watch a movie. What do you do? No need to wait (and pay!) for a service technician, just restore the saved settings file … and press "Play".

Protect Your System and Yourself!

Password-protectable maximum volume settings let you protect your amplifier and speakers from damage that could result from overdriving. Independent volume settings are provided for each Path. You can protect against hearing injury from headphones by setting the maximum volume!

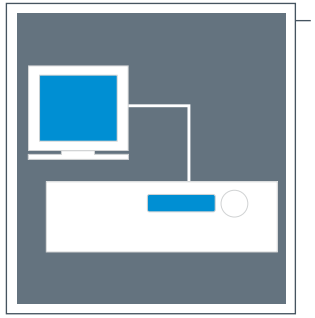
Since all audio signals pass through the volume control, its quality is of tantamount importance. Digital volume controls can add noise and distortion, diminishing the purity of sound. The D1 uses superior wide-range Crystal® CS3310 analog volume controls with extremely low noise and distortion—even at the lowest listening levels—for smooth, natural sound.

Universal Learning Remote Control

The D1 Remote Control operates Main, Zone 2, Zone 3 and Record Paths. It can also be programmed to operate six other components, such as Televisions, DVD Players, CD Players, Satellite Receivers, VCRs and more—an extensive universal library of codes is included. It can also learn almost any other command to a button location. It is even smart enough to let you know when its batteries are running low—the back light (which normally glows blue) will remain off, and the red LED will flash as it turns off. Intuitive, logically laid out, and easy to use, our remote control lets you spend less time "fiddling" and more time taking command of all your components.

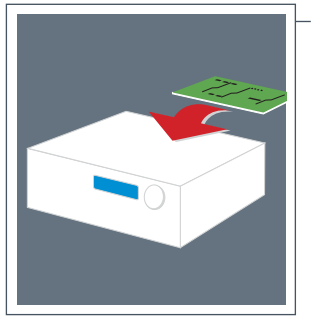
Communication

The D1 makes communicating over home local area networks (LAN) very easy. It is compatible with Crestron® and AMX™ (via RS-232 interface).



Software Updates

What if the operation of the D1 or AVM 30 is upgraded in the future? No problem. Updating is as easy as 1-2-3. First, connect your computer to the Internet. Second, go to our website at **www.anthemAV.com** for the AVM 30 or **www.statement.anthemAV.com** for the D1 and download the latest version of the software. Third, connect your computer to the D1 or AVM 30 and upload the new software. It's easy and takes only a few minutes to fully update your D1 or AVM 30 with the latest operating system.



"Future Ready" – Hardware Upgrades

Although no audio/video component can claim to be absolutely future proof, Anthem has a proven track record when it comes to offering upgrades that keep our products at the leading edge. While upgrades of emerging new technologies (HDMI, FireWire®, etc.) will come at a cost, that cost will be little more than the increased price of the unit with the new technology incorporated. That means you can enjoy the vastly superior performance of your D1 or AVM 30 today, with confidence for tomorrow.

"… spectacular … multichannel audio of the highest order."

– Roger Kanno, Home Theater & Sound

"… a level of performance far beyond what is normally available at this price … sound was big and bold … totally enveloping … incredibly tight and defined … immediate and real … razor-sharp imaging, dynamics, and all the other hallmarks of a true high-end amplifier … one of the very best multichannel amplifiers currently available."

– Roger Kanno, Home Theater & Sound

"The P5 — has a tendency to leave you somewhat speechless … such enormous performance and value for the dollar that it has to be auditioned by those serious about the performance of their multi-channel equipment. Highly recommended."

– Manoj Motwani, HDTVetc.

"… the P2 rules … beautiful power … set to redefine the concept of value in the audiophile world … incisive clarity … crisp and articulate … exceptionally neutral … delivering the subtleties, nuances and harmonic delicacies — without editorializing … seriously slamming bass — always correct — and relevant to the scale of the music."

– Jason Thorpe, SoundStage!

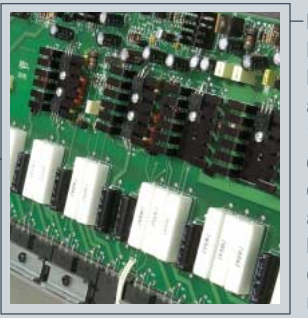
PERFORMANCE FROM THE HEART

In life we admire "heart." When we say someone has heart we mean passion, spirit, fortitude. And we applaud it. While the amplifier is the brawn behind every successful music and movie presentation, it is also the heart! Its role is as crucial as that of the speakers in its ability to render delicate musical detail one moment and deliver room-shaking explosions the next. The most exquisite pieces of music fall flat without clean, quiet power to sustain them through to their natural, musical ebb. Movie special effects require an inordinate supply of stable high-current power to give visceral credibility to the "special" aspect of each effect! In fact, all truly successful sound reproduction requires "heart."

The heart of an amplifier rests with its design and it is here that P2 and P5 amplifiers reveal their high-end lineage. Our commitment to edge-of-the-art design includes multi-layered, hand-designed circuit boards with thick two-ounce copper traces; rugged, independent power supplies with tuned toroidal power transformers for each amplifier channel; fourteen rugged bipolar output devices per channel for an overdesigned output stage; massive custom-designed, convection-cooled heatsinks with serrated fins; a "no-fuse" design. And the list goes on.

"To say, as Anthem does in its literature, that the Statement D1 and P5 can 'recreate the passion a music lover experiences when attending a live musical performance, or the thrilling sound a movie buff experiences in the very best movie theaters' is an understatement. The D1 preamp/processor/tuner and P5 multichannel power amplifier are the best home-theater components I have heard in my system, and it was a joy to review them."

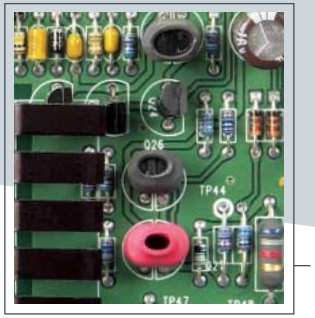
– Gary Altunian, The Perfect Vision



Edge-of-the-Art Multi-Mono Design: Less Talk, More Power!
By design, P2 and P5 amplifiers are actually powerful independent "monoblock" amplifiers. Each channel is self-contained on its own glass-epoxy circuit board and heatsink. Each channel also benefits from its own independent power supply. Since there is no common audio path between channels there is a complete absence of crosstalk. Regardless of whether one channel or all channels are driven, there is no penalty in performance—even when all channels are operating at maximum output!

Frequency-response channel matching is superb. The musical picture is seamless and exquisitely detailed with a multichannel soundstage that is astonishingly transparent, cohesive and three dimensional.

In the rare event that servicing is required, the modular design allows it to be done quickly and easily by an authorized technician.



Active-Load Cascoded Complementary Feedback Input Stage
P2 and P5 amplifiers benefit from our proprietary input topology—a unique departure from the classical differential input stage. Eight low-noise bipolar input devices, hand-matched for superior balance, are configured in a complementary active-load cascoded feedback arrangement. Heat shrink tubing applied around each critical input pair ensures superior thermal tracking. Designed to reduce distortion, this arrangement not only ensures exceptionally linear response but also superior bandwidth and superb reliability.

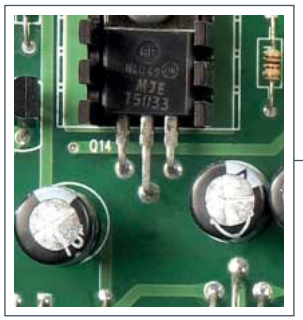
Massive Toroidal Transformers: An Audible Difference!
Conservatively rated, in a low-profile design, these low-impedance toroidal power supplies—one per amplifier channel—make no sacrifices when it comes to delivering a continuous supply of pure, clean low-noise power. They are shaped to minimize stray magnetic field radiation and tuned to minimize hum. A sequence-controlled soft turn-on significantly reduces power line transients and in-rush current during start up, preventing accidental tripping of circuit breakers.

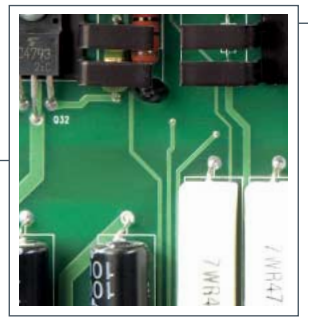
Fourteen Bipolar Output Devices Per Channel
An amplifier's ultimate performance for music and movies is directly related to the the number of high-quality, high-current devices used in the output stage. The greater the number of devices employed, the lower the dissipated power on each device and the more power available for the crescendos in music and the demanding special effects in movies. While some manufacturers cut corners to save costs in this area, our designers incorporated fourteen rugged bipolar output devices per channel for an overdesigned output stage. This results in tremendous current held in reserve and unsurpassed amplifier reliability.

Independent Power Supplies: Maximum Power and a Whole New Level of Quiet
Due to the high costs involved in incorporating sophisticated independent power supplies many high-end designs have only one power supply—unregulated and common to the input/driver and output stages. The drawbacks to this design are a reduction in maximum power output and overall efficiency when all channels are operating. The constant charging and discharging of the power supply filtering capacitors can introduce noise into the audio path. Anthem™ Statement designers opted for a more expensive, but ultimately more effective, cleaner and quieter power supply design.

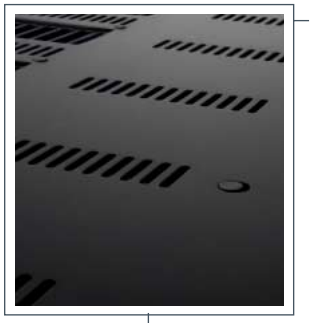
Each amplifier channel features two separate and autonomous power supplies fed from separate transformer windings. A regulated high-power supply used in the driver stage facilitates an overdesigned output stage, allowing for highly efficient use of the unregulated high-power supply. P2 and P5 amplifiers are able to deliver stable, continuous power at maximum output, regardless of the number of channels being driven. Even when challenged by the most demanding musical transients, output remains fluid and continuous. Dynamic bursts of power called for by explosions and various taxing special effects in movies are delivered instantly and effortlessly. While some amplifiers tend to oscillate when driving lower-impedance loads, the P2 and P5 remain perfectly stable under all conditions. If pushed into clipping, our proprietary anti-saturation tracking power supply circuit takes over to ensure seamless recovery.

Since the use of a regulated power supply in the driver stage removes any noise emitted by the bridge rectifier (often heard as an audible hum at 120 Hz and its harmonics), the P2 and P5 achieve an utterly white noise floor. Signal-to-noise ration in P2 and P5 amplifiers is outstanding at 125 dB.





2-oz Copper Traces on Hand-Designed Circuit Boards
Our 2-layer FR-4 glass-epoxy circuit boards feature plated through-holes and heavy 2-oz thick copper traces to promote excellent conductivity. Extensive use of power- and ground- planes ensures exceptionally low noise and increased protection from stray electromagnetic energy—internally, as well as externally from other devices.



"No Fuse" Design

By eliminating fuses in the DC rails, P2 and P5 amplifiers are Direct-Connected™ to the power supply capacitor bank. This keeps output impedance remarkably low while making more power available to the amplifier and ultimately to the speakers. Even when the amplifiers are driving lower- or complex-impedance loads, the result is audibly superior sonic performance. If an output short circuit does occur, only the AC line breaker will trip—there are no fuses to replace. Not only is this a function of convenience (lifting the cover to change a fuse in the mighty P5 could be challenging), it also produces an advanced circuit board layout and a strong, rugged output stage.

The standby low-power supply is protected by auto-resetting Positive Temperature Coefficent thermistors (PTCs). Again, the inconvenience of replacing fuses is avoided while amplifier circuitry remains well protected. Once the condition that tripped the PTC disappears, the circuit automatically restores itself and the amplifier becomes fully functional again.

Anthem™ Statement designers incorporated an AC line breaker on every channel, positioned where they can be visually monitored and easily reset by the user. Once again, these amplifiers reap the benefits of a completely modular design—in the event of an abnormal condition, if the breaker on one channel trips the remaining channels will continue to operate normally. And since the breakers are completely outside of the signal path they do not compromise sonic integrity.

Oversize Gold-Plated Binding Posts

Custom-designed oversize gold-plated Anthem™ Statement binding posts ensure full power delivery at all times. They are easy to use and facilitate large speaker cable connectors.

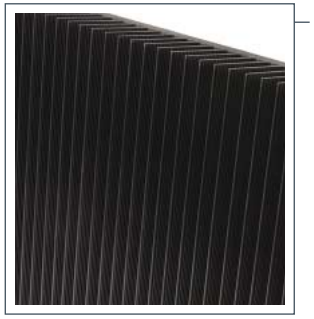
Multiple Power On/Off Options

P2 and P5 amplifiers can be powered On/Off three ways: manually, with the On/Off switch on the front panel; remotely, via the 12-volt trigger input on the rear panel; or automatically, with our patented Auto-On/Off circuit. Auto-On turns the amplifier on when it senses an input signal on any channel and switches it off 20 minutes after the input signal ends.

RCA and XLR True-Balanced™ Inputs!

A three-way switch on the amplifiers' rear panel offers an RCA input, a professional quality XLR balanced input and an attenuated XLR balanced connection (for preamplifiers that require it).

Gold-plated female RCA jacks and gold-plated XLR balanced connections provide the highest-quality input connections. Our fully buffered, double-balanced-XLR input stage (True-Balanced™) ensures the lowest level of noise and hum possible.



Oversize Aluminum Heatsinks

With more than 1,125 square inches (7,258 cm^2) of computer-modeled heatsink (including large serrated fins) per channel, P2 and P5 amplifiers are superbly equipped to dissipate the heat generated by their high power levels quickly and efficiently. This, in turn, eliminates the need for noise-inducing cooling fans. A thermal sensor on each individual heatsink continuously monitors safe operating temperature.

Designed and Built in North America

Fine-grain brushed aluminum cover and extruded aluminum handles. Heavy-gauge, low-resonance 12-awg steel chassis and oversize aluminum heatsinks generate serious high-end weight and authority.

Superior-quality Blue LEDs add an elegant finishing touch to the high-end demeanour of these multichannel amplifiers.

While a detachable AC power cord comes in handy when connecting various components, its function is more than one of simple convenience. High-end products typically offer the freedom to use a variety of after-market power cords offered by specialty cable manufacturers. By including IEC detachable AC female sockets and high-power, high-quality 14-awg AC cords, P2 and P5 amplifiers further demonstrate their high-end pedigree.

The P2 and P5 can also be ordered with optional rack-mount handles. (See Dealer for more information.)

"… phenomenal … outstanding … an incredible experience …"

– Kris Deering, Secrets of Home Theater and High Fidelity

"… tremendous performance … astonishingly quiet … completely transparent … beautiful musical nature … whatever music I threw at the Anthem gear, it delivered in spades … every nuance is presented wonderfully … never showed any sign of running out of steam … synergy between the amps and the speakers was incredible … delivered all the dynamics with a musical grace that was effortless and very convincing … whether you are a music or movie fan, the Anthem Signature A Series amplifiers offer outstanding value and performance."

– Kris Deering, Secrets of Home Theater and High Fidelity

MUSCULAR IN CHARACTER. MUSICAL BY NATURE

Just like their larger and more powerful siblings, the remarkable A2 and A5 amplifiers are muscular in character and musical by nature. Multi-talented performers supplying the power behind physically demanding surround-sound home theater or retrieving, with remarkable finesse and transparency, the immediacy of a live music performance.

So what is behind the remarkable high-end performance of A-Series amplifiers? The answer lies in our commitment to state-of-the-art design. A2 and A5 amplifiers enjoy completely modular construction; highly refined four-layer circuit board topology; a minimum number of parts in the signal path, and those of only the highest quality; eight bipolar output devices per channel; mirror-imaged, frequency-response channel matching; hand-matched complementary input devices; massive toroidal power supplies; oversize convection-cooled aluminum heatsinks; and a no-fuse design.

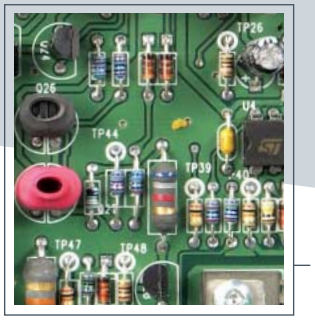
As Anthem™ Statement creations, A2 and A5 amplifiers are fundamentally more revealing, display an outstanding degree of musical precision and deliver extraordinary resolution for both music and movies.

"No Fuse" Design

By eliminating fuses in the DC rails, A2 and A5 amplifiers are Direct-Connected™ to the power supply capacitor bank. This keeps output impedance remarkably low while making more power available to the amplifier and ultimately to the speakers. Even when the amplifiers are driving lower- or complex-impedance loads, the result is audibly superior sonic performance. If an output short circuit does occur, only the AC line breaker will trip—there are no fuses to replace.

The standby low-power supply is protected by self-resetting Positive Temperature Coefficent thermistors (PTCs). The inconvenience of replacing fuses is avoided and amplifier circuitry remains well protected. Once the condition that tripped the PTC disappears, the circuit restores itself automatically and the amplifier becomes fully functional again. Anthem™ Statement engineers incorporated AC line breakers where they can be easily reset. And since the breakers are completely outside of the signal path, they do not compromise sonic integrity.

A2 and A5 amplifiers are incredibly stable into difficult, low-impedance speaker loads, making them consummately reliable performers.



Hand-Matched Complementary Input Devices

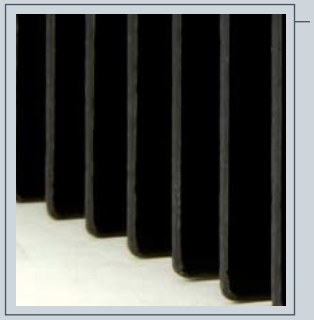
Heat shrink tubing applied around each critical pair of hand-matched complementary input devices ensures superior thermal tracking and lower voltage offset and distortion.

Massive Oversize Power Supply Reservoirs

To store all of the energy required for the immense dynamic bursts of various special effects in a movie or taxing crescendos in music, large banks of capacitors are required. A2 and A5 amplifiers employ 30,000 micro farads (µF) of capacitance per channel. (That's 150,000 µF in the A5!) With so many joules of power in reserve these amplifiers are able to instantly and effortlessly deliver full bursts of power.

Oversize Output Connections

Anthem™ Statement custom-designed, oversize gold-plated binding posts ensure full power delivery at all times. They are easy to use and facilitate large speaker cable connectors.



Oversize Convection-Cooled Aluminum Heatsinks

Oversize convection-cooled custom heatsinks with serrated fins ensure that A2 and A5 amplifiers dissipate the heat generated by their higher power levels quickly and efficiently. Computer-designed and modeled to maximize contact area for exceptional heat transfer, these amplifiers run cooler for greater reliability without the need for a noise-inducing fan.

Designed and Built in North America

Elegant fine-grain brushed aluminum cover and extruded aluminum handles. The heavy-gauge 14-awg steel chassis adds requisite high-end weight and authority.

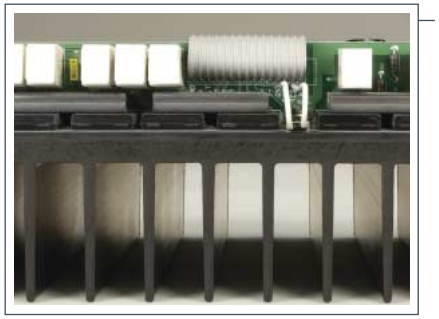
Superior-quality Blue LEDs add an elegant finishing touch to the high-end elegance of these multichannel amplifiers.

High-end products typically offer the freedom to use a variety of after-market power cords offered by specialty cable manufacturers. A2 and A5 amplifiers include IEC detachable AC female sockets and high-power, high-quality 14-awg AC cords.

Both amplifiers can be ordered with optional rack-mount handles. (See Dealer for more information.)

"Keep it Simple" Design Philosophy

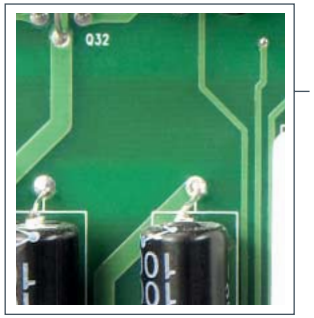
While all parts are of the finest quality and tolerance, Anthem™ Statement designers use the fewest possible number of parts in the signal path to maintain the integrity of the sound. A2 and A5 amplifiers reveal a profound sense of musical purity, transparency and naturalness.



Eight Bipolar Output Devices Per Channel

Solid-state amplifiers get their power from the output devices used in the amplification stage—the greater the number of devices per channel, the greater the available high-current power for the crescendos in music or the thrills, thunder and explosions in movies. Performance is simply more effortless. It also means that the amplifiers run cooler, making them more reliable.

A2 and A5 amplifiers each have eight bipolar output devices per channel—that's 40 devices in the A5 alone—ensuring tremendous current reserves and outstanding reliability.

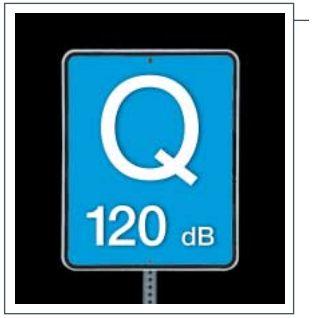


Four-Layer Circuit Boards

Our hand-designed 4-layer FR-4 glass-epoxy circuit boards with plated through-holes makes extensive use of groundplanes to ensure excellent separation between amplifier channels. The result is exceptionally low noise and low crosstalk between channels, as well as between inputs. This multi-layered design also offers increased protection from electrostatic discharge.

State-of-the-Art Modular Design

A2 and A5 amplifiers reflect the benefit of a common modular design enhanced by our highly refined amplifier circuit topology. Each amplifier channel is self-contained on its own board and heatsink. In the rare event that servicing is required, it can be done quickly and easily by a qualified technician, minimizing the down time of your system.



Vanishing Noise and Distortion

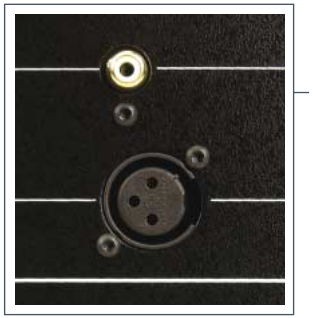
Transformer-induced noise at the bass frequencies of 60 Hz, 120 Hz, and 180 Hz has effectively been eliminated. As a result, A2 and A5 amplifiers boast vanishing noise and remarkably low levels of Total Harmonic Distortion. The reproduction of subtle harmonic structures in each of these amplifiers reveals extraordinary spatial ambience and soundstage dimension.

Remarkable Level of Quiet

Signal-to-noise ratio in the A2 and A5 amplifiers is 120 dB. Music and movie soundtracks simply appear out of dead silence, allowing you to become lost in the emotion of the original performance.

Ultra-Quiet Toroidal Power Supply

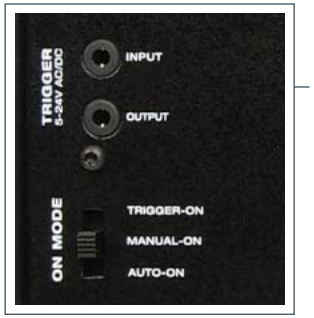
Thanks to massive, conservatively rated toroidal power supplies designed with high rail voltages, A2 and A5 multichannel amplifiers provide ultra-quiet performance. Transformers are shaped to minimize stray electromagnetic radiation and tuned to minimize hum.



Reference-Quality Input Connection

Gold-plated female RCA jacks on the A2 and A5 provide a high-quality input connection. True-Balanced™ XLR connections ensure the lowest level of noise and hum possible.

Our unique auto-sensing circuit means no switches. Just plug in either the RCA or XLR connector and our auto-sensing circuit will automatically select the right input.



Power On/Off Three Ways

A2 and A5 amplifiers can be powered On/Off three ways: manually, with the On/Off switch on the front panel; remotely, via the 12-volt trigger input on the rear; or automatically, with our patented Auto-On/Off circuit—an incoming audio signal immediately switches it on, and approximately 20 minutes after the audio signal ends, it simply switches off.

"WOW … darn near impeccable … at the head of its class."

Wes Phillips, onhometheater

"… state-of-the-art … among the front rank of top-performance preamps … unusually comprehensive … hard to beat for features, usability, price and performance … when each preamp is judged on its merits and value for its price, the AVM 30 is irresistible."

– David Ranada, Sound & Vision

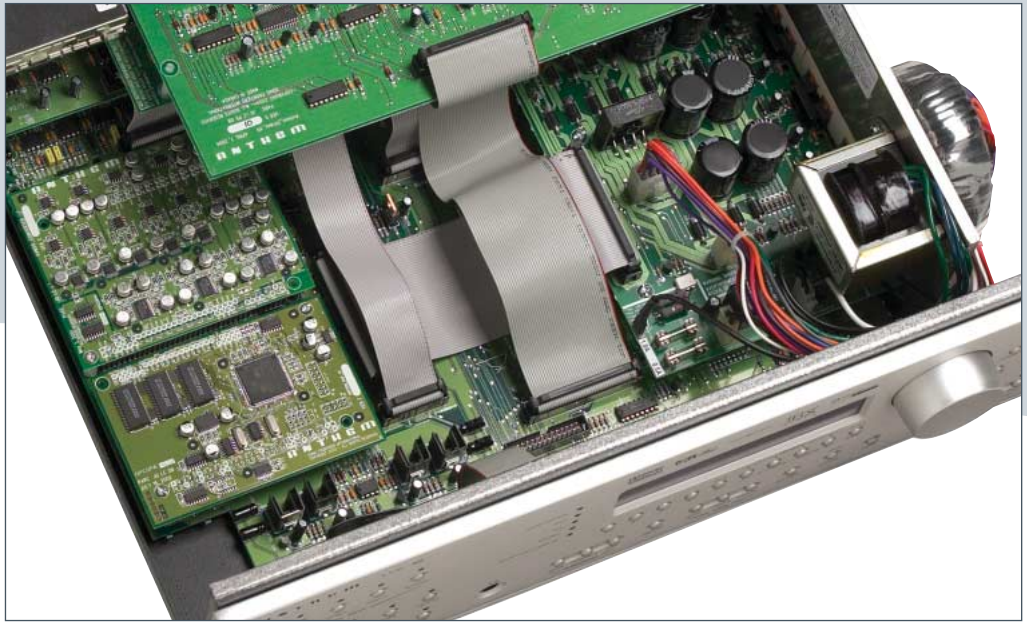
"Incredibly refreshing … a superb piece … exceptionally well-rounded … intelligently thought-out … lets me do what I want without hassle, lets me know how things are without grief, and once I've got it the way I want it—lets me forget about the details … In the realm of truly good SSP units, I have yet to meet a rival."

– Colin Miller, Secrets of Home Theater and High Fidelity

"… best performing in its class … competes with the highest priced preamps … crystal clear … heart-thumping energy … incredibly detailed … great resolution and control … great presence … soulful and tasteful … paints an aural landscape … may well be the brightest contender on the price and performance landscape."

– Tim Hart, AudioVideo Revolution

**Some highlights are from a previous generation. Model has been further improved for even better sound.*



AUDIO/VIDEO MASTER

The AVM 30 contains eight high-end components in one:

- Preamplifier
- Analog-to-Digital Converter (ADC)
- Digital-to-Analog Converter (DAC)
- Surround-Sound Processor
- Highest-Quality HDTV Video Switcher
- Multiroom/Whole-House Entertainment Control Center
- FM/AM Tuner
- Headphone Preamplifier

Stunning two-channel/multichannel sound and the world's most complete multizone controller put the power of a Master in your hands. The AVM 30 is recognized around the world as the ultimate in *affordable* high-end sound. In fact the *only* preamp/processor that outperforms the award-winning AVM 30 is its sibling, the sensational Anthem™ Statement D1.

Just like the D1, the AVM 30 is first of all a state-of-the-art music preamplifier/home theater processor with built in tuner and independent source selection for recording. It is also a high-end whole-home entertainment control center, and like the D1, its whole-home focus is as much about distributed video as it is about distributed audio, making it possible (and simple!) for you to select and direct audio and video program material throughout your home.

Designed and built in North America on the same award-winning platform as the D1, our AVM 30 incorporates the same user-friendly Operating System. (For complete information see the Operating Overview on pages 9 to 16.)

The following pages reveal why the AVM 30 is the best selling preamp/processor in its price class, challenging other brands at two or three times its price!

WHY THE AVM 30 IS THE BEST-SELLING PREAMPLIFIER/PROCESSOR IN ITS CLASS (and above!)

- Designed and built in North America by Sonic Frontiers
- Component parts are carefully chosen for their ability to maintain the lowest possible total harmonic distortion and noise (THD + N)
- Handcrafted circuit board layouts (not done by auto-routers) with extensive use of groundplanes achieve exceptionally low noise, low crosstalk, and protect against electrostatic discharge
- 4-layer motherboard with separate power- and groundplanes
- 6-layer DSP, A/D and D/A boards. A/D and D/A boards use separate analog and digital planes, as well as separate power- and groundplanes
- All critical signal paths are surrounded by groundplanes, a painstaking, dedicated design process
- Large, conservatively rated toroidal-transformer-based linear power supply minimizes radiation interference
  – Two power transformers—total 120 VA
  – Low-radiating, low-noise main toroidal transformer
- Ten power supply regulation stages
- Our own precision Digital Signal Processing design using one of the most powerful DSP engines in the industry—the Freescale™ Semiconductor DSP 56367 rated at 150 million instructions per second
- Individual low-jitter RS-485 line receivers on all digital inputs
- Superior Digital-to-Analog/Analog-to-Digital conversion
  – D/A uses AKM® AK4382 converters capable of up to 24-bit x 192 kHz resolution
  – A/D uses AKM® AK5383 converters operating at up to 24-bit x 96 kHz resolution
- Audiophile-grade operational amplifiers (Burr-Brown™ OPA 2134's and Motorola® MC33078's)
- Superior-quality (Crystal® CS3310) analog attenuator (volume control)
- Fully buffered audio and video inputs for minimum crosstalk
- Highest-quality video-switching circuitry on completely independent and isolated circuit boards
- High-precision thru-hole passive components
- Heavy-gauge non-resonant chassis
- Headphone amplifier features a high-current/voltage design with a dedicated fully discrete output stage
- Massive mechanical shielding

Especially for the Purist

- Analog-Direct available on all inputs (bypasses A/D's, DSP and D/A's)
- Tone Bypass (removes Bass/Treble from the signal path)
- Balanced 2-channel XLR Digital input (AES/EBU) provides the best digital signal transmission possible
- True-Balanced™ 2-channel Analog input for the best analog signal transmission possible
- True-Balanced™ Analog outputs provide the best noise rejection and purest analog signal transmission possible
- For best possible video performance, on-screen displays can be disabled, completely removing their character generators from the video signal path

The AVM 30 incorporates the same user-friendly Operating System as our Anthem™ Statement D1. For the complete Operating Overview see pages 7 to 13.

DESIGN OVERVIEW

- (4) Independent Signal Paths (Main, Zone 2, Zone 3, Record)

INPUTS

- Auto Digital/Analog Input Switching (For Every Source)
- Built-In FM/AM Tuner with Stereo/High-Blend/Mono Setting (Memorized to each FM Preset)
- (7) Coaxial Digital Audio Inputs (Assignable to Multiple Digital Sources)
- (3) Toslink Digital Audio Inputs (Assignable to Multiple Digital Sources)
- (1) AES/EBU Digital Audio Input (Assignable to Multiple Digital Sources)
- Bit Rate/Sample Rate Status Indicator (Displays PCM, Dolby® Digital, DTS®)
- (7) Stereo S/E Analog Audio Inputs (DSP or Direct)
- (1) Stereo True-Balanced™ (XLR) Analog Audio Input (DSP or Direct)
- (1) Six-Channel S/E Audio Input (DSP or Direct)
- Source EQ (Independent for Each Source)
- (4) Component Video Inputs (Assignable to Multiple Sources)
- HDTV Video Switching (All formats up to 1080p)
- (7) S-Video Inputs (Assignable to Multiple Sources)
- (7) Composite Video Inputs (Assignable to Multiple Sources)

MAIN

- (10) True-Balanced™ (XLR) Analog Audio Outputs
- (10) S/E Analog Audio Outputs
- Second Center Channel Output (Parallel–Balanced and S/E)
- Second Subwoofer Output (Parallel–Balanced and S/E)
- (1) Stereo Headphone Output (Independent Volume/Bass/Treble/Balance Controls)
- (2) Component Video Outputs
- (1) S-Video Output
- (1) Composite Video Output
- Mode Presets by Source (Assignable for Each Source)
- Simulcast Video+Audio Sources
- Lip-Sync Delay (For Each Source in half-ms increments)
- Main Sources – Copy to Other Paths
- On-Screen Display (Bypassable)
- On-Screen Setup Menu
- Selectable Setup Menu Background Color (Blue, Black, Magenta)
- Adjustable Mute Level
- Direct Remote Control Codes for Modes

6-CHANNEL ANALOG-DSP (MAIN)
(DVD-Audio/SACD)

- Selectable 44 kHz, 48 kHz, 88 kHz, 96 kHz
- Bass Management
- Time Alignment for Listener Position
- Bass/Treble
- Lip-Sync Delay
- THX®, Dolby® Pro Logic IIx and DTS® Neo:6 Post Processing
- Surrounds can be Rerouted to Rears (5.1 Output)
- Surrounds can be Copied to Rears (7.1 Output)
- 2-Channel Stereo Downmix (For Headphone, Zone 2, Zone 3, Record)

SURROUND MODES (MAIN)

- AnthemLogic–Music™ (No Center Channel)
- AnthemLogic–Cinema™ (Up to 7.1)
- Dolby® Pro Logic IIx Music (with Adjustments)
- Dolby® Pro Logic IIx Movie
- Dolby® Pro Logic IIx Matrix
- Dolby® Pro Logic IIx Game
- Dolby® Pro Logic
- DTS® Neo:6 Music (Center Image Adjustment)
- DTS® Neo:6 Cinema
- All-Channel Stereo (Up to 7.1)

SURROUND MODES (MAIN) *continued*
- Mono
- Mono-Academy
- All-Channel Mono
- Individual Speaker Levels Memorized for Each Mode

5.1/6.1 MODES (MAIN)
- Dolby® Digital 5.1
- Dolby® Digital EX™
- DTS® 5.1
- DTS® ES Matrix
- DTS® ES Discrete
- DTS® 2-Channel Stereo Downmix (For Headphone, Zone 2, Zone 3, Record)
- Dynamics Adjustment (Dolby® Digital and DTS®)
- Dynamics Reset to Normal at Power Off
- Individual Speaker Levels Memorized for Each Mode

THX® MODES (MAIN)
- THX® Cinema
- THX® Ultra2™ Cinema
- THX® MusicMode
- THX® Surround EX™
- THX® Games Mode
- THX® ReEQ: On/Off (can be applied even when THX® is turned Off)

BASS MANAGEMENT (MAIN)
- Independent Cinema and Music Speaker Configurations (Assignable to Each Source)
- Auto-LFE Option (For Cinema or Music Configuration)
- Dipole Setting for Surround/Rear
- Center Channel EQ
- Room Resonance Filter
- THX® Boundary Gain Compensation
- Super Subwoofer Setting (Subwoofer Operates when Fronts are Set to Large)
- Cinema and Movie Configurations each include:
  - Independent Crossovers by Speaker Group (5-Hz Steps)
  - Independent Crossover for Subwoofer (5-Hz Steps)
  - Subwoofer Variable Phase
  - Subwoofer Polarity
  - LFE Crossover Bypass

ZONE 2
- (1) Stereo S/E Analog Audio Output
- (1) Stereo True-Balanced™ (XLR) Audio Output
- Variable or Fixed Volume Level Setting
- Adjustable Maximum Volume Setting
- Bass, Treble, Balance Controls
- (1) S-Video Output
- (1) Composite Video Output
- Simultaneous S-Video and Composite Outputs
- Simulcast Video+Audio Sources
- On-Screen Display (Bypassable)
- On-Screen Setup Menu

ZONE 3
- (1) Stereo S/E Analog Audio Output
- Variable or Fixed Volume Level Setting
- Adjustable Maximum Volume Setting
- Bass, Treble, Balance Controls
- (1) S-Video Output
- (1) Composite Video Output
- Simultaneous S-Video and Composite Outputs
- Simulcast Video+Audio Sources

RECORD
- Tape Record Out: (1) Stereo S/E, (1) S-Video, (1) Composite
- VCR Record Out: (1) Stereo S/E, (1) S-Video, (1) Composite
- (2) Coaxial Digital Record Outputs (Independent)
- Analog-In to Digital-Out (Selectable 16-bit/44 kHz, 16-bit/48 kHz, 24-bit/88 kHz, 24-bit/96 kHz)
- Dithered Output for 16-bit Recording

CUSTOM INSTALLATION
- (2) 50-mA Trigger Outputs
- (1) 200-mA Trigger Output
- (3) Powered IR Receivers
- (2) IR Emitters
- RS-232 Communication/Internet Upgradeability
- RS-232 Crestron® and AMX™ Compatible
- IEEE 1394 (Firewire®) Provision
- Front-Panel Lockout Option
- User Settings Save Function
- Installer Settings Save Function
- Setup Menu Lockout
- Wake-Up/Shut-Off Timers (Main, Zone 2, Zone 3)
- On/Off Skip Timers (Main, Zone 2, Zone 3)
- Sleep Timers (Main, Zone 2, Zone 3)

UPGRADEABILITY
- Hardware Upgradeable
- Easy (and at no charge) Website Software Upgradeability

ADDITIONAL
- Universal Learning Back-Lit Remote Control
- Power Failure / Overheating Text Warning
- 5-Year Warranty (1 Year on Remote Control)

"… a major performer … at the top of my list of recommended two-channel components."

Sandy Bird, Secrets of Home Theater and High Fidelity

"… eminently enjoyable … loaded with features … easy musical flow … good snap — good rhythmic coherency … nice shimmer … I got so wrapped up in the music that I was ready to grab my wife and hit the dance floor."

– John Crossett, SoundStage!

"… remarkable … strikingly realistic … coherence, clarity, naturalness … dialogue breathes freely … precise instrumental separation … harmonic richness … amazing range … the smoothness—will seduce you … never once tripped up … simply outstanding …"

– Robert Lussier, Québec AudioVideo

"… this preamplifier was performing fantastically … accurate and very detailed … music was well paced, rhythmic and easy to listen to … soundstage was tight and instruments were well placed … the cornerstone of a very high-performing system …"

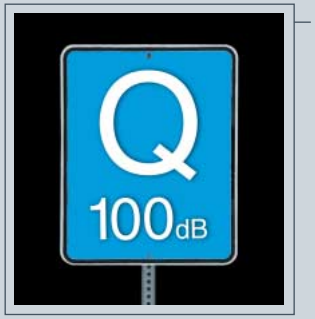
– Brian Kahn, AudioVideo Revolution

IT'S ABOUT THE MUSIC

Getting audiophiles to agree on the merits of a high-end audio product is never an easy task. But in the end, it's about the music. Gauging any audio product comes down to just one question … how does it sound? In the case of Anthem's latest Preamplifier/Tuner the answer is simple … the TLP 1 *sings!*

Some say the more bells and whistles the better! Give us minimalist, cry the audiophiles—nothing more than what the artist recorded! The TLP 1 brings both camps together. Its focus is sonic performance! Behind the polished upscale look is Anthem's highly effective "keep-it-simple" philosophy. Nothing to clutter the signal path, nothing to compromise the integrity of the music. Having said this, however, there remains an understated complexity to this stereo preamplifier/tuner, quietly hidden away inside its many integrated circuits. Far more complex than most so-called "high-end" or "purist" preamplifiers, the TLP 1 enjoys all of the benefits of trickle-down technology. It incorporates design features from our enormously successful and award-winning AVM 30, as well years of intensive research and development in high-end sound by Anthem.

The TLP 1 is an audiophile's dream … extremely low noise and distortion, extended frequency response and a near dead-silent low-noise floor. It paints an animated sonic picture—never fatiguing, never ordinary, always inspiring.

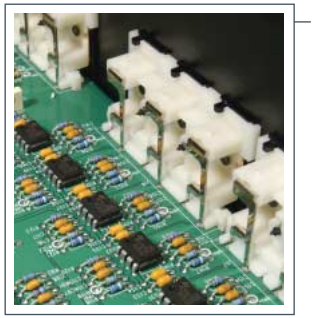


100 dB Signal-to-Noise Ratio

At 100 dB, signal-to-noise ratio in the TLP 1 rivals that of far more expensive preamplifiers on the market—a direct result of the meticulous attention paid to groundplanes and the design of the power supply. Circuit board traces were painstakingly laid out by hand. Out of the silent black background the only thing that comes through is the music—rich, full and enveloping—drawing you into its heart, technicalities forgotten.

The Power Supply

The TLP 1's power supply starts with our unique, custom-made low-noise transformer—a major contributor to the TLP 1's low-noise floor. It boasts a larger-than-usual core with extremely low flux density (10 K Gauss) which helps to dramatically reduce line spiking and high-frequency noise. Four low-ESL, low-ESR oversized capacitors and four precision voltage regulators provide fully independent power supply rail voltages to minimize interference and noise.



High-End Operational Amps

In keeping with our philosophy of "less is more," tonal purity is preserved through the use of high-end operational amps employed with a threefold purpose: to dramatically reduce the number of discrete component parts that would otherwise have to be used; increase gain without attenuating high frequencies that provide "air" and detail; and amplify the signal without increasing the load on the signal source.

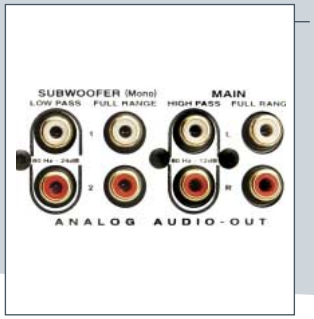
The TLP 1 uses superior operational amps selected for each circuit design application to ensure minimum distortion and low DC offset. Odd-order harmonic distortion, particularly irritating to the ear, is reduced across the entire audio bandwidth.

Analog Volume Control

Clean, articulate sound—particularly at low listening levels—hinges on the quality of the volume control. The TLP 1 features a high-performance, digitally controlled CMOS stepped-attenuator, adjustable in 0.5-dB increments. Volume setting is controlled by a microprocessor, while the audio signal itself travels through in analog form. Careful attention was paid to the circuit-board layout, microprocessor design and software design to maintain the purity of the analog audio signal at all times.

Purity and Integrity of Sound

TLP 1 parts are superior quality and close tolerance—carefully chosen to maintain the lowest possible total harmonic distortion plus noise. Take for example, our use of metal film resistors and high-quality film signal capacitors. And all inputs are individually buffered to prevent one source from interfering with another.



Stereo High-Pass, Subwoofer Output

In addition to Main outputs for full-range speakers, the TLP 1 contains a built-in 80-Hz crossover facilitating the use of bookshelf speakers together with a subwoofer. The built-in crossover offers both high-pass (speaker) and low-pass (subwoofer) outputs. In addition, a full-range subwoofer output is included for subwoofers with their own built-in crossover.

Tone Controls with Memory

True to its purist roots, the TLP 1 provides options when it comes to tone. Bass and treble controls only affect the tonal extremes in a quite undramatic way. These actions are "remembered" for each source. Boost the treble for AM listening, then set to "0" for CD and both settings will be remembered.

Tone Contouring

Our hearing sensitivity to bass decreases when listening to music at low volume levels. The TLP 1's selectable Tone Contour works in concert with the volume control, using a proven psycho-acoustic model to add precise amounts of bass at various low volume levels beginning at approximately -20 dB. The result is clean, balanced sound—even at low levels.

FM/AM Tuner

The TLP 1's superb-sounding built-in tuner features 18 FM and 6 AM station presets with selectable Stereo, High-Blend and Mono modes.

For added convenience these modes are memorized to the presets — simply set it once to enjoy the "best" sound all of the time.

The TLP 1's High-Blend is a superb alternative to Mono, dramatically decreasing the high-frequency noise of a weak stereo signal, while maintaining full stereo sound through the critical midrange.

Three-Level Display

The front panel LCD display offers an adjustable brightness control, making it easy to see the display during the day and allowing you to dim it in the evening. When dimmed, it will brighten momentarily whenever a button is pressed or volume is changed.

Record with Independent Source Selection

Main and Record outputs are completely independent, allowing you to select a different source for each output simultaneously. So, while you are listening to your usual FM radio station counting down the hits on a Saturday morning, you can make a recording of your favorite CD to play in the car.

Zone 2 Operation

For your convenience, along with the Record output, the TLP 1 provides a concurrent fixed-level Zone 2 output. For Zone 2 operation simply connect this output to an integrated amplifier or stereo receiver.

Match Source Levels

Want each of your components to play at a similar level when you switch from source to source (i.e. FM/AM to Tape, to CD, to TV, etc.), so that you don't have to reach for the volume each time you switch? The TLP 1 lets you make independent input level-trim adjustments for each source in order to bring these otherwise bothersome differences to the same level.

Universal Remote Control

The TLP 1's intuitive, logically laid out Remote Control not only gives you command of the TLP 1, but also over your TV, DVD-player or VCR, satellite receiver or cable converter. The rear-panel IR input jack allows you to use an IR repeater (not supplied) to control the TLP 1 from another room —as, for example, in Zone 2 operation.

A universal library of built-in codes gives the TLP 1's Remote Control tremendous flexibility. Use it with hundreds of components—VCRs, TV-VCR combinations, cable converters, satellite/DBS receivers, DVD-players and laserdiscs —from various manufacturers.

Trigger Output

A trigger output makes it easy to automate your music listening system. If your other components, including your power amplifier, have provisions for a trigger input, you can automatically turn them on or off with a push of the TLP 1's Power button or Remote Control. Simply connect the Relay Trigger output from the TLP 1 to the trigger input of your power amplifier, TV, CD, etc.

Superb Headphone Amplifier

Terrific for late-night listening when you don't want to disturb the family. Serious listening is always a pleasure with the TLP 1's built-in high-end headphone amplifier.

"… awesome … incredible … a revelation."

Roger Kanno, SoundStage!

"… fast and transparent … enveloping and realistic … power and authority that is remarkable … incredible dynamics … thunderous bass … plays — without strain … one of the more refined amplifiers that I have heard at anywhere near its price point."

– Roger Kanno, SoundStage!

"… exceptional … startling precision and authority … exceedingly clean and detailed … fast and transparent … plenty of power and excellent frequency response … able to deliver unexpected thrills … paints a vivid sonic picture … at a price that begs for auditioning."

– Doug Schneider, SoundStage!

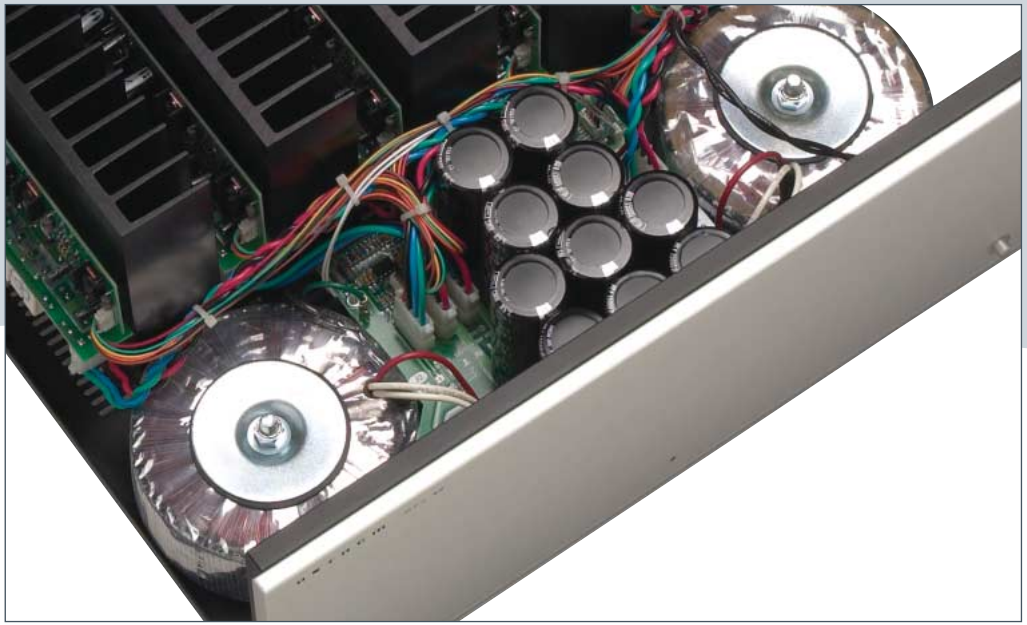
"… one of the few true high output, audiophile quality, multi-channel power amplifiers on the market today … an endless supply of sheer power."

– Alan L. Maier, SMR Home Theater

Some highlights are from a previous generation. Model has been further improved for even better sound.

SoundStage! Network Reviewers CHOICE soundstagenetwork.com

audiorevolution.com Best of 2001



A STUDY IN SONIC CONTRASTS

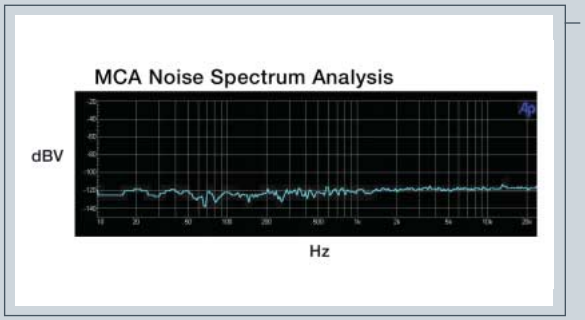
Our remarkable MCA multichannel amplifiers are a study in wonderful sonic contrasts. Hefty, with a weight and authority reminiscent of far more expensive amplifiers; able to play deep, tight and loud without breakup. They are capable of reproducing all of the multichannel magic and complex dynamics of the most demanding 7.1-channel surround-sound experience without ever losing control.

And they are consummate musicians. Musical, refined and detailed —delivering a transparency and clarity that brings out even the most elusive notes of an elaborate aria.

Whether it's the finesse required to satisfy the discerning audiophile, the power demanded by the avid home theater enthusiast, or the reliability required for professional multimedia and studio installations, MCA amplifiers deliver it all!

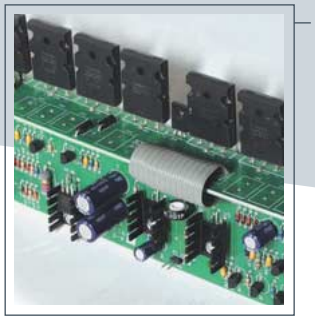
Sound Purity and Integrity

Our design for MCA amplifiers follows the "Keep-It-Simple" principle. We utilize the fewest possible number of parts in the signal path to maintain the integrity of sound. All parts are of the highest quality and tolerance. As a result, these remarkable amplifiers offer the profound sense of musical purity, transparency and naturalness that is demanded by the most discerning listener.



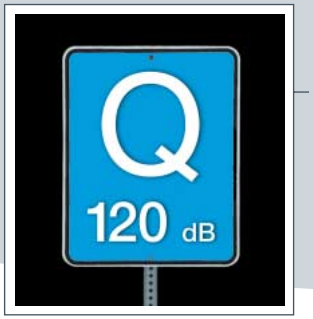
No Noise, Low Distortion

In a rare feat, transformer-induced noise at the bass frequencies of 60 Hz, 120 Hz, and 180 Hz, has effectively been eliminated. MCA amplifiers boast vanishing noise and unbelievably low levels of Total Harmonic Distortion.



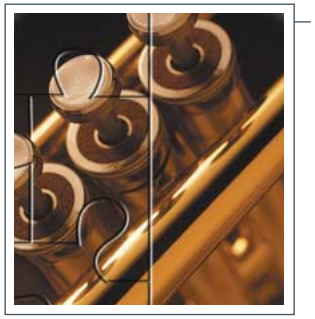
Eight Output Devices Per Channel!

Solid state amplifiers get their power from the output devices used in the amplification stage. Just like cylinders in a car's engine, the greater the number of devices per channel, the greater the available high-current power for the crescendos in music, or the thrills, thunder and explosions in movies. Performance is simply more effortless. It also means that the amplifier will run cooler, making it more reliable.



A New Level of Quiet!

Signal-to-noise ratio in MCA amplifiers is 120 dB … a truly remarkable feat! Music and movie soundtracks simply appear out of "dead" silence allowing you to become lost in the emotion of the original performance — the mark (and the end goal) of a truly high-end audio-video component. During even the most tranquil musical passages or dramatically quiet moments in a movie, the background is so 'black' that it is audibly gone.

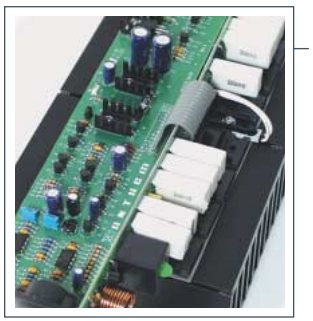


Mirror-Imaged Channels

Frequency response channel-matching in our amplifiers has always been far better than the norm. In fact, MCA amplifiers are virtually mirror-imaged. All amplifier channels offer identical performance. The musical picture is incredibly vivid, seamless, and detailed, with a multi-channel soundstage that is exceptionally clear, coherent and three-dimensional.

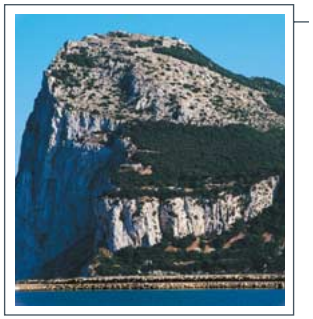
Massive Toroidal Power Supplies

MCA amplifiers deliver incredible dynamics thanks to massive "audio-phile-approved", conservatively rated power supplies designed with high rail voltages. Advanced-generation toroidal power transformers are used to ensure ultra-quiet performance by minimizing stray magnetic field radiation. This provides the pure, clean, low-noise power that is needed to reproduce the full dynamics of home theater and the most complex and dynamic music recordings.



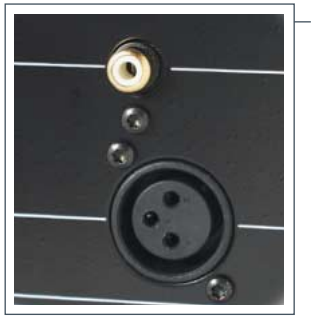
Modular Design

Each amplifier channel is completely self-contained on its own board and heatsink. In the rare event that service should be required, it can be done quickly and easily by a qualified technician, minimizing the "down time" of your system.



Stable as a Rock

Our amplifiers are incredibly stable into difficult, low-impedance speaker loads, making these superb-sounding dynamos reliable performers in even the toughest circumstances.



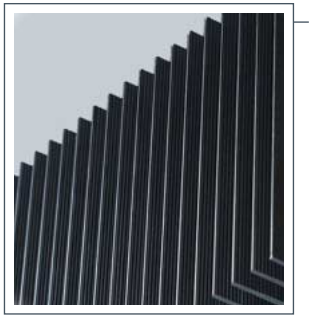
RCA Inputs, XLR Balanced Inputs

High quality in! High quality out! Gold-plated female RCA jacks provide a high-quality input connection, but with MCA amplifiers you get much more. XLR balanced connections are commonly used in professional recording and broadcasting to ensure the lowest level of noise and hum possible. Now you can use this same high-quality connection for reference-quality high-end sound since XLR balanced inputs are included on all MCA amplifiers.

Our unique auto-sensing circuit makes connecting inputs a snap. Just plug in either the RCA or XLR connector and our auto-sensing circuit automatically selects the right input. No switches, no problems, it's simple.

50% Larger Power Supply Reservoirs

More Power! More space to store it! With 225 watts, large banks of capacitors are needed to store all of the energy required for the immense dynamic bursts of various special effects in a movie, or the taxing crescendo of a solo piano. These amplifiers are the most powerful MCA amplifiers yet, employing 30,000 micro farads (µF) of capacitance per channel (that's 150,000 µF for the MCA 50). With so many joules of energy in reserve, when called upon, the MCA 20, MCA 30 and MCA 50 are able to deliver full bursts of power instantly and effortlessly.



Larger Custom Chassis and Heatsinks

A redesigned chassis and large custom heatsinks—33% larger than previous MCA Series amplifiers—ensure that these amplifiers dissipate the heat generated by their higher power levels quickly and efficiently. Our custom heatsinks are computer-designed and modeled to maximize contact area for exceptional heat transfer efficiency. Put simply, they run cooler for greater reliability.

Multiple Power Switches

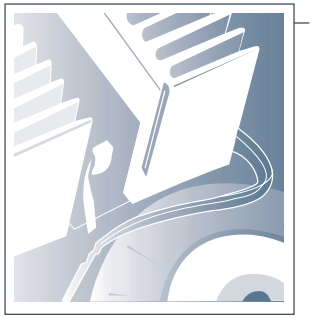
MCA amplifiers can be powered On/Off three ways: manually with the On/Off switch on the front panel; remotely via the 12-volt trigger input on the rear; or automatically, with our patented Auto-On/Off circuit—an incoming audio signal immediately switches it on, and approximately 20 minutes after the audio signal ends, it simply switches off.

Better Output Connection

Our own custom-designed, oversized robust binding posts ensure full power delivery at all times. They're easy to use and facilitate large speaker cable connectors.

Detachable Power Cord

While a detachable AC power cord comes in handy when connecting various components, its function is more than one of simple convenience. High-end products typically offer the freedom to use a variety of after-market power cords offered by specialty cable manufacturers. By including IEC detachable AC female sockets and high-power, high-quality 14-awg AC cords, MCA amplifiers further demonstrate their high-end pedigree.



Superior Craftsmanship

Like all Anthem™ products the MCA 20, MCA 30 and MCA 50, designed and built in North America, are like no other amplifiers in the world: custom low-noise high-power toroidal transformers; high-current bipolar output transistors; high-quality filter capacitors; advanced power supply regulators; oversized aluminum heatsinks; custom-designed dual binding posts; and patented auto-on/off circuitry. Superior craftsmanship that is reflected in clean, clear, audiophile-quality sound from top to bottom of the frequency spectrum.

"… exceptional … musically right … timbrally accurate … a stone-cold bargain."

– Shane Buettner, The Perfect Vision

"What do you say about a product that exceeds all expectations for its price category? … I've not heard an amplifier that's significantly better at anywhere near its price."

– Shane Buettner, The Perfect Vision

"… fleet-of-foot nature maintained the recording's quality with ease … kept pace with complex soundtrack material … excellent impact and transient speed … could easily handle the format, and seven speakers, without losing control. This is pretty incredible."

– Jeff Fritz, Home Theater & Sound

"… a remarkable product … The ability to complement any component with its velvety silence and poise under demanding conditions, along with its musicality, put it at the top of its peer group."

– Tim Hart, AudioVideo Revolution

ANYTHING BUT AVERAGE

Unlocking the incredible sound sculptures, special effects and dynamics of today's home theater and music recordings is no small feat, at least for the average amplifier. But then, Anthem's PVA 2, PVA 5 and PVA 7 amplifiers are anything but average. They are equally at home delivering all of the thundering impact and excitement of a surround sound movie experience as they are imparting the subtle nuances of a multichannel music performance, or paying rich sonic tribute to the sweeping highs and lows of your favorite stereo recording.

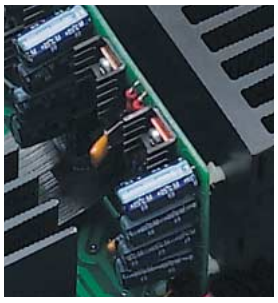
They are worldclass overachievers, easily able to withstand the scrutiny of direct comparisons, both sonically and in build quality with amplifiers costing several times as much! They are, by a wide margin, the best value high-end amplifiers available.

Superior Circuit Design

The sonic purity of the PVA amplifier design is the result of our intensive research and development in high-end design. Superior high-end sound begins with a superior power supply. These amplifiers use custom-built, low-noise high-power toroidal transformers and advanced power supply regulators with high-quality, low-ESL, low-ESR filter capacitors. They possess huge storage capacity of 100,000 micro farads (µF) in the PVA 7, 60,000 in the PVA 5, and 40,000 in the PVA 2.

Our proprietary and patented circuit designs follow the 'Keep-It-Simple' principle, using the fewest number of parts in the signal path to maintain the integrity of sound. These amplifiers provide the finesse and instantaneous output power to effortlessly reproduce the challenging variety of special effects in movies and demanding musical passages. They are stable as a rock, even into difficult loads, maintaining complete sonic integrity at all output levels to provide a clear, detailed and consistently powerful sonic performance.

PVA amplifiers can be powered On/Off three ways: manually, with the On/Off switch on the front panel; remotely, via the 12-volt trigger input; or automatically, with our patented Auto-On/Off circuit—an incoming audio signal immediately switches it on, and approximately 20 minutes after the audio signal ends, it simply switches off.



Superior Parts and Materials

Superior performance demands superior parts and materials. PVA amplifiers are designed and built in North America using the finest quality parts and materials. From FR-4 military-spec epoxy circuit boards to multiple high-current bipolar-output transistors; from oversized, computer-designed heatsinks to our own custom-designed robust binding posts, the build quality of these amplifiers ranks among the finest in the world!

"… as good as no noise at all!"

"… an incredible S/N ratio of 122 dB. Good grief! That's as good as no noise at all" said Brian Florian, Secrets of Home Theater and High Fidelity, commenting on the PVA 7. Whether it's the subtle (or not-so-subtle) special effects in a movie, or the tonal subtleties produced by the strings of a single violin, PVA amplifiers capture it all! Ultra-low distortion and an incredible signal-to-noise ratio place these amplifiers among the cleanest and quietest on the market. From a completely silent 'black' background sound appears in its purest form to envelop you in powerful emotion.

Expert Craftsmanship. Superior Quality Control

Our products are award-winning and internationally recognized not only for their exceptional sonic performance, but also for their superb craftsmanship and reliability. Every product must meet our rigorous standards of performance before it is released to market. The result is a truly superb selection of products that are guaranteed to provide their owners with complete and lasting satisfaction. It's not surprising that Anthem™ products are highly sought after around the world!

A Passion for Better Sound!

Before pragmatic design, before performance testing and long before production comes passion! A passion to produce something truly exceptional. Anthem™ products are extraordinary, meeting and exceeding the needs and expectations of audiophiles everywhere. Whether for personal or professional use, Anthem™ products are worldclass leaders in high-end performance and value.

All Anthem™ Statement products available in:

19-1/4-inch Standard Version
Height (with feet removed):
D1 – 3 units
A2/A5 – 4 units
P2/P5 – 5 units

19-inch Rack-Mount Version
Height (with feet removed):
D1 – 3 units
A2/A5 – 4 units
P2/P5 – 5 units

17-1/4-inch Version
(Typical Component Width)
Height (with feet removed):
D1 – 3 units
A2/A5 – 4 units
P2/P5 – 5 units

(See Dealer for more information.)

ANALOG AUDIO

Input Impedance . . . . . 20 kΩ
Output Impedance
Main–RCA . . . . . 300 Ω
XLR . . . . . 600 Ω
Zones 2/3 and Record – RCA . . . . . 51 Ω
Rated Input . . . . . 2.0 Vrms
Maximum Input . . . . . 5.3 Vrms
6-Channel S/E . . . . . 5.3 Vrms
All Others . . . . . 5.3 Vrms
Rated Output (100 kΩ load) . . . . . 2.0 Vrms
Minimum Load . . . . . 5 kΩ
Maximum Output
RCA . . . . . 6.3 Vrms
XLR . . . . . 12.6 Vrms
Headphone Output . . . . . 100 mW into 32 Ω at 0.2% THD+N
Volume Control Range
Main . . . . . -95.5 dB to +31.5 dB (in 0.5 dB increments)
Zone 2/3 and Headphone . . . . . -62.5 dB to +10.0 dB (in 1.25 dB increments)
Bass Management
High-Pass Slope (Small Speaker Setting) . . . . . 12 dB/octave (2nd order)
Low-Pass Slope (Subwoofer) . . . . . 24 dB/octave (4th order)
Crossover Frequency (Adjustable in 5-Hz increments) . . . . . 25 Hz to 160 Hz
Tone Control
Bass Turnover Frequency . . . . . 200 Hz
Treble Turnover Frequency . . . . . 2 kHz
Range . . . . . ±12 dB
Filter Response Type . . . . . Shelf
Channel Separation (at 1 kHz) . . . . . 82 dB
Crosstalk Between Inputs (at 1 kHz) . . . . . 86 dB

MAIN PATH (RCA and XLR Outputs)

Frequency Response and Bandwidth
6-Channel BAL Direct Inputs . . . . 10 Hz to 20 kHz (+0 -0.2 dB), 1 Hz to 130 kHz (+0 -3 dB)
2-Channel BAL Direct Inputs . . . . 10 Hz to 20 kHz (+0 -0.2 dB), 1 Hz to 130 kHz (+0 -3 dB)
2-Channel S/E Direct Inputs . . . . . 10 Hz to 20 kHz (+0 -0.2 dB),1 Hz to 130 kHz (+0 -3 dB)
Analog-DSP Inputs at 24/96 . . . . . 10 Hz to 20 kHz (+0 -0.3 dB), 2 Hz to 44 kHz (+0 -3 dB)
Digital Inputs at 24/96 . . . . . 10 Hz to 20 kHz (+0 -0.2 dB),1 Hz to 45 kHz (+0 -3 dB)
THD+N (at Rated Input and Output)
6-Channel S/E Direct Input (80 kHz BW) 0.003%
2-Channel BAL Direct Input (80 kHz BW) 0.004%
2-Channel S/E Direct Inputs (80 kHz BW) 0.006%
Analog-DSP Inputs at 24/48 or 24/96 (AES17 filter) 0.004%
Digital Inputs at 24/48 or 24/96 (AES17 filter) 0.004%
IMD (CCIF at 15 kHz and 16 kHz)
6-Channel S/E Direct Input . . . . . < 0.001%
2-Channel BAL Direct Input . . . . . < 0.001%
2-Channel S/E Direct Inputs . . . . . < 0.001%
Analog-DSP Inputs at 24/48 . . . . . 0.001%
Digital Inputs at 24/48 or 24/96 . . . . . 0.001%
S/N Ratio (ref. 2.0 Vrms, IEC-A filter)
6-Channel S/E Direct Input . . . . . 107 dB
2-Channel Direct Inputs . . . . . 107 dB
Analog-DSP Inputs at 24/48 or 24/96 . . . . . 101 dB
Digital Inputs at 24/48 or 24/96 . . . . . 104 dB

XLR Pin Configuration . . . . . Pin 1: Ground, Pin 2: Positive, Pin 3: Negative

ZONE 2 and ZONE 3 PATHS

Frequency Response and Bandwidth . . 20 Hz to 20 kHz (+0, -0.1 dB), 3 Hz to 140 kHz (+0, -3 dB)
THD+N (at Rated Input and Output) (80 kHz BW) 0.06%
IMD (CCIF at 15 kHz and 16 kHz) 0.06%
S/N Ratio (ref. 2.0 Vrms, IEC-A Filter) . . . . . 97 dB

RECORD PATH

Analog to Digital Conversion S/N Ratio (A-weighted) (IEC-A filter) . . . . . 103 dB

FM TUNER

Sensitivity 50 dB S/N . . . . . 13 dBμ typical, 25 dBμ max.
IHF . . . . . 10 dBμ typical, 20 dBμ max.
S/N Ratio Mono . . . . . 75 dB typical, 65 dB min.
Stereo . . . . . 69 dB typical, 60 dB min.
Distortion Mono . . . . . 0.2% typical, 1.0% max.
Stereo . . . . . 0.3% typical, 1.5% max.
Stereo Separation . . . . . 40 dB typical, 25 dB min.
Adjacent Channel Selectivity (±400 kHz) . . . . . 70 dB typical, 60 dB min.
Frequency Response . . . . . 25 Hz to 15 kHz (±2 dB)

AM TUNER

Sensitivity (20 dB S/N) . . . . . 49 dBμ typical, 56 dBμ max.
S/N Ratio . . . . . 50 dB typical, 43 dB min.
Distortion . . . . . 0.7% typical, 2.0% max.
One-Signal Selectivity (±10 kHz) . . . . . 24 dB typical, 18 dB min.

VIDEO

Bandwidth of complete path, from input to output
Composite and S-Video . . . . . 70 MHz
Component: Y . . . . . 110 MHz
Pr . . . . . 90 MHz
Pb . . . . . 80 MHz
All video inputs and outputs are 75 Ω, 1.5 Vp-p. Component video switching is suitable for any format up to 1080p (line-doubled 1080i).

DIGITAL AUDIO

All digital audio inputs and outputs are to S/PDIF electrical (75 Ω, 0.5 Vp-p), S/PDIF optical (Toslink), or AES/EBU (110 Ω, 5 Vp-p) standards. SRC output is 24-bit/192-kHz regardless of input.
Analog to Digital Converters . . . . . AKM® AK5394A
Input Receiver . . . . . AKM® AK4112A
Processor . . . . . Dual Freescale™ DSP 56367 at 150 MHz
Sample Rate Converters . . . . . Analog Devices AD1896
Digital to Analog Converters . . . . . AKM® AK4395

CONTROL

Infrared
Maximum 12V Supply Control . . . . . 150 mA
Carrier Frequency . . . . . 38 kHz
Maximum Emitter Current . . . . . 60 mA per output

RS-232 Interface
Connection . . . . . DB-9F, straight-wired
Pinout (Statement D1 side) . . . . . Pin 2: Tx, Pin 3: Rx, Pin 5: Ground
Baud Rate . . . . . 1200 to 115200
Configuration . . . . . 8 data bits, 1 stop bit, no parity bits, flow control (RTS, CTS, NONE)

Trigger Outputs
Polarity . . . . . 3.5 mm mono (tip positive), sleeve ground
Maximum Current at 12 VDC . . . . . 50 mA (Triggers 1,2), 200 mA (Trigger 3)
Sequential Delay . . . . . 250 ms

POWER REQUIREMENTS

Supply Voltage . . . . . 105 V to 130 V, 60 Hz
Power Consumption . . . . . Maximum 140 W

DIMENSIONS

Height . . . . . 5-7/8 inches (14.9 cm) including feet
Width . . . . . Faceplate 19-1/4 inches (49 cm), chassis 17-1/4 inches (43.8 cm)
Depth . . . . . 15-1/4 inches (38.7 cm)
Weight (unpacked) . . . . . 36.2 lb (16 kg)

ADVANCED LOAD MONITORING (ALM™)

All Anthem™ and Anthem™ Statement amplifiers are designed to perform flawlessly—offering stunning musicality, tonal neutrality and incredible dynamics while driving any speaker load reliably under real-world conditions! The power supply is conservatively rated and the amplifiers run cool for greater reliability, but we didn't stop there.

These amplifiers feature our ALM™ (Advanced Load Monitoring) circuitry which protects sensitive output devices by constantly monitoring temperature, current and voltage to ensure optimum long-term performance. ALM™ is totally non-invasive—it is not in the signal path and only engages in the most extreme circumstances to protect the amplifier from damage by maintaining the safe operating area of the output devices. Buyer beware however! Not all amplifier manufacturers have sophisticated load-monitoring provisions. Many have saved the added cost, leaving their output devices unprotected, choosing instead to use the amplifier's output devices as "fuses." At Anthem/Sonic Frontiers, ALM™ is just one of the ways in which our products provide owners with years of reliable service.

P2 / P5

INPUTS
P2 . . . . . 2 Single-Ended, 2 Balanced, 1 Relay Trigger (3.5 mm Mono Jack)
P5 . . . . . 5 Single-Ended, 5 Balanced, 1 Relay Trigger (3.5 mm Mono Jack)

OUTPUTS
P2 . . . . . 2 Pairs Speaker Binding Posts, 1 Relay Trigger (3.5 mm Mono Jack)
P5 . . . . . 5 Pairs Speaker Binding Posts, 1 Relay Trigger (3.5 mm Mono Jack)

SWITCHES
Front Panel . . . . . Power (On/Off)
Rear Panel . . . . . On/Off Modes (Trigger, Manual, Auto), Inputs (RCA, XLR, XLR -6dB)

THD+N . . . . . 0.0007% at 1 kHz, 0.008% at 20 kHz
(100 W into 8 ohms)

POWER OUTPUT
(Per channel, continuous RMS, 20 Hz to 20 kHz, <0.1% THD, one or all channels driven.)

Impedance	8 Ω		4 Ω		2 Ω	
# of Channels Driven	1	All	1	All	1	All
P2, P5	325 W	325 W	500 W	500 W	675 W	675 W

Statement P2 and P5 amplifiers are stable into any impedance down to a short circuit at full output.

IMD . . . . . 0.00019% (CCIF, 325 W into 8 Ω)

POWER BANDWIDTH . . . . . 10 Hz to 150 kHz (+0 -3 dB, 325 W into 8 Ω)
FREQUENCY RESPONSE . . . . . 20 Hz to 20 kHz (+0 -0.15 dB), 5 Hz to 100 kHz (+0 -2 dB)
INPUT SENSITIVITY (RCA and XLR 0 dB inputs) . . . . . 1 Vrms in for 28.3 Vrms out (100 W into 8 Ω
INPUT IMPEDANCE . . . . . 18 kΩ (RCA), 22 kΩ (XLR)
DAMPING FACTOR . . . . . >600 at 20 Hz, 400 at 1 kHz (ref. 8 Ω)
S/N RATIO . . . . . 125 dB, A-weighted (ref. 325 W)
CROSSTALK (between any two channels) . . . . . -140 dB (20 Hz), -80 dB (20 kHz)
VOLTAGE GAIN . . . . . 29 dB
SLEW RATE . . . . . 40 V/µs

POWER REQUIREMENTS
SUPPLY VOLTAGE . . . . . 105 to 130 V, 60 Hz
POWER CONSUMPTION
P2 . . . . . 1800 W
P5 . . . . . 2 x 1800 W

DIMENSIONS
Height . . . . . 9-3/8 inches (23.8 cm) including feet
Width . . . . . Faceplate 19-1/4 inches (49 cm), chassis 17-1/4 inches (43.8 cm)
Depth . . . . . 22-1/2 inches (57.2 cm) including handles

WEIGHT (unpacked)
P2 . . . . . 75 lb (34 kg)
P5 . . . . . 130 lb (59 kg)

A2 / A5

INPUTS
A2 . . . . . 2 Single-Ended, 2 Balanced, 1 Relay Trigger (3.5 mm Mono Jack)
A5 . . . . . 5 Single-Ended, 5 Balanced, 1 Relay Trigger (3.5 mm Mono Jack)

OUTPUTS
A2 . . . . . 2 Pairs Speaker Binding Posts, 1 Relay Trigger (3.5 mm Mono Jack)
A5 . . . . . 5 Pairs Speaker Binding Posts, 1 Relay Trigger (3.5 mm Mono Jack)

SWITCHES
Front Panel . . . . . Power (On/Off)
Rear Panel . . . . . On/Off Modes (Trigger, Manual, Auto), Inputs (RCA, XLR)

THD+N . . . . . 0.001% at 1 kHz, 0.03% at 20 kHz
(200 W into 8Ω)

POWER OUTPUT
(Continuous RMS, 20 Hz to 20 kHz, <1.0% THD)

Impedance	8 Ω		4 Ω		2 Ω	
# of Channels Driven	1	All	1	All	1	All
A2	225 W	200 W	370 W	300 W	535 W	410 W
A5	225 W	180 W	370 W	265 W	535 W	340 W*

**Special Test Conditions Required for 2 Ω*

IMD . . . . . 0.0005% (CCIF, 225 W into 8 Ω)
POWER BANDWIDTH . . . . . 10 Hz to 100 kHz (+0 -3 dB, 225 W into 8 Ω)
FREQUENCY RESPONSE . . . . . 20 Hz to 20 kHz (+0 -0.15 dB), 5 Hz to 100 kHz (+0 -2 dB)
INPUT SENSITIVITY . . . . . 1.5 Vrms in for 225 W out into 8 Ω
INPUT IMPEDANCE . . . . . 10 kΩ (RCA), 15 kΩ (XLR)
DAMPING FACTOR . . . . . 360 at 1 kHz (ref. 8 Ω)
S/N RATIO . . . . . 120 dB, A-weighted (ref. 225 W)
CROSSTALK . . . . . -78 dB at 1 kHz
VOLTAGE GAIN . . . . . 29 dB
SLEW RATE . . . . . 30 V/µs

POWER REQUIREMENTS
SUPPLY VOLTAGE . . . . . 105 to 130 V, 60 Hz
POWER CONSUMPTION
A2 . . . . . 800 W
A5 . . . . . 1800 W

DIMENSIONS
Height . . . . . 7-5/8 inches (19.4 cm) including feet
Width . . . . . Faceplate 19-1/4 inches (49 cm), chassis 17-1/4 inches (43.8 cm)
Depth . . . . . **A2**: 13-1/2 inches (34.3 cm), **A5**: 19-3/8 inches (49.2 cm)

WEIGHT (unpacked)
A2 . . . . . 34 lb (15.5 kg)
A5 . . . . . 57 lb (25.9 kg)

P2

P5

A2

A5

(See note on optional rack mount versions, D1 Specifications page.)

Optional Rack Kit
(See Dealer for more information.)

ANALOG AUDIO

Input Impedance . . . . . 20 kΩ
Output Impedance
- Main–RCA . . . . . 300 Ω
- XLR . . . . . 600 Ω
- Zones 2/3 and Record–RCA . . . . . 51 Ω

Rated Input . . . . . 2.0 Vrms
Maximum Input
- 6-Channel S/E . . . . . 3.0 Vrms
- All Others . . . . . 5.3 Vrms

Rated Output (100 kΩ load) . . . . . 2.0 Vrms
Minimum Load . . . . . 5 kΩ
Maximum Output
- RCA . . . . . 6.3 Vrms
- XLR . . . . . 12.6 Vrms

Headphone Output . . . . . 100 mW into 32 Ω at 0.2% THD+N
Volume Control Range
- Main . . . . . -95.5 dB to +31.5 dB (in 0.5 dB increments)
- Zones 2/3 and Headphone . . . . . -62.5 dB to +10.0 dB (in 1.25 dB increments)

Bass Management
- High-Pass Slope (Small Speaker Setting) . . . . . 12 dB/octave (2nd order)
- Low-Pass Slope (Subwoofer) . . . . . 24 dB/octave (4th order)
- Crossover Frequency (Adjustable in 5 Hz increments) . . . . . 25 Hz to 160 Hz

Tone Control
- Bass Turnover Frequency . . . . . 200 Hz
- Treble Turnover Frequency . . . . . 2 kHz
- Range . . . . . ±12 dB
- Filter Response Type . . . . . Shelf

Channel Separation (at 1 kHz) . . . . . 82 dB
Crosstalk Between Inputs (at 1 kHz) . . . . . 86 dB

MAIN PATH (RCA and XLR Outputs)

Frequency Response and Bandwidth
- 6-Channel BAL Direct Inputs . . . . 10 Hz to 20 kHz (+0 -0.2 dB), 1 Hz to 130 kHz (+0 -3 dB)
- 2-Channel BAL Direct Inputs . . . . 10 Hz to 20 kHz (+0 -0.2 dB), 1 Hz to 130 kHz (+0 -3 dB)
- 2-Channel S/E Direct Inputs . . . . . 10 Hz to 20 kHz (+0 -0.2 dB), 1 Hz to 120 kHz (+0 -3 dB)
- Analog-DSP Inputs at 24/96 . . . . . 10 Hz to 20 kHz (+0 -0.3 dB), 2 Hz to 37 kHz (+0 -3 dB)
- Digital Inputs at 24/96 . . . . . 10 Hz to 20 kHz (+0 -0.2 dB), 1 Hz to 39 kHz (+0 -3 dB)

THD+N (at Rated Input and Output)
- 6-Channel S/E Direct Input (80 kHz BW) 0.003%
- 2-Channel BAL Direct Input (80 kHz BW) 0.004%
- 2-Channel S/E Direct Inputs (80 kHz BW) 0.006%
- Analog-DSP Inputs at 24/48 (AES17 filter) 0.006%
- Digital Inputs at 24/48 (AES17 filter) 0.004%

IMD (CCIF at 15 kHz and 16 kHz)
- 6-Channel S/E Direct Input 0.001%
- 2-Channel BAL Direct Input 0.002%
- 2-Channel S/E Direct Inputs 0.003%
- Analog-DSP Inputs at 24/48 . . . . . 0.003%
- Digital Inputs at 24/48 . . . . . 0.001%

S/N Ratio (ref. 2.0 Vrms, IEC-A filter)
- 6-Channel S/E Direct Input . . . . . 107 dB
- 2-Channel Direct Inputs . . . . . 106 dB
- Analog-DSP Inputs at 24/48 . . . . . 100 dB
- Digital Inputs at 24/96 . . . . . 104 dB

XLR Pin Configuration . . . . . Pin 1: Ground, Pin 2: Positive, Pin 3: Negative

ZONE 2 and ZONE 3 PATHS

Frequency Response and Bandwidth . . 20 Hz to 20 kHz (+0 -0.1 dB), 3 Hz to 140 kHz (+0, -3 dB)
THD+N (at Rated Input and Output) (80 kHz BW) 0.06%
IMD (CCIF at 15 kHz and 16 kHz) 0.06%
S/N Ratio (ref. 2.0 Vrms, IEC-A Filter) . . . . . 97 dB

RECORD PATH

Analog to Digital Conversion S/N Ratio (IEC-A filter) . . . . . 100 dB

FM TUNER

Sensitivity	50 dB S/N	13 dBµ typical, 25 dBµ max.
	IHF	10 dBµ typical, 20 dBµ max.
S/N Ratio	Mono	75 dB typical, 65 dB min.
	Stereo	69 dB typical, 60 dB min.
Distortion	Mono	0.2% typical, 1.0% max.
	Stereo	0.3% typical, 1.5% max.

Stereo Separation . . . . . 40 dB typical, 25 dB min.
Adjacent Channel Selectivity (±400 kHz) . . . . . 70 dB typical, 60 dB min.
Frequency Response . . . . . 25 Hz to 15 kHz (+0 -2 dB)

AM TUNER

Sensitivity (20 dB S/N) . . . . . 49 dBµ typical, 56 dBµ max.
S/N Ratio . . . . . 50 dB typical, 43 dB min.
Distortion . . . . . 0.7% typical, 2.0% max.
One-Signal Selectivity (±10 kHz) . . . . . 24 dB typical, 18 dB min.

VIDEO

Bandwidth of complete path, from input to output

Composite and S-Video		70 MHz
Component:	Y	110 MHz
	Pr	90 MHz
	Pb	80 MHz

All video inputs and outputs are 75 Ω, 1.5 Vp-p. Component video switching is suitable for any format up to 1080p (line doubled 1080i).

DIGITAL AUDIO

All digital audio inputs and output are to S/PDIF electrical (75 Ω, 0.5 Vp-p), S/PDIF optical (Toslink) or AES/EBU (110 Ω, 5 Vp-p) standards.
Processor . . . . . Freescale™ DSP 56367 at 150 MHz
Audio Converters
- Analog to Digital . . . . . AKM® AK5383 up to 24-bit / 96 kHz
- Digital to Analog . . . . . AKM® AK4382 up to 24-bit / 192 kHz

CONTROL

Infrared
- Maximum 12 V Supply Current . . . . . 150 mA
- Carrier Frequency . . . . . 38 kHz
- Maximum Emitter Current . . . . . 60 mA per output

RS-232 Interface
- Connection . . . . . DB-9F, straight-wired
- Pinout (AVM 30 side) . . . . . Pin 2: Tx, Pin 3: Rx, Pin 5: Ground
- Baud Rate . . . . . 1200 to 115200
- Configuration . . . . . 8 data bits, 1 stop bit, no parity bits, flow control (RTS, CTS, NONE)

Trigger Outputs
- Polarity . . . . . 3.5 mm mono (tip positive), sleeve ground
- Maximum Current at 12 VDC . . . . . 50 mA (Triggers 1,2), 200 mA (Trigger 3)
- Sequential Delay . . . . . 250 ms

POWER REQUIREMENTS

Supply Voltage . . . . . 105 V to 130 V, 60 Hz
Power Consumption . . . . . Maximum 120 W

DIMENSIONS

Height . . . . . 5-7/8 inches (14.9 cm) including feet; Rack-mounting: 3 rack units without feet
Width . . . . . 17-1/4 inches (43.8 cm)
Depth . . . . . 15-1/4 inches (38.7 cm)
Weight (unpacked) . . . . . 28 lb (12.7 kg)

PREAMPLIFIER

Input Impedance ..... 25 kΩ
Main Output Impedance ..... 300 Ω
Record Output Impedance ..... 51 Ω
Rated Input ..... 1.0 Vrms
Maximum Input ..... 4.0 Vrms
Rated Output (100 kΩ load) ..... 1.0 Vrms
Minimum Load ..... 5 kΩ
Maximum Output ..... 3.3 Vrms
Headphone Output ..... 60 mW into 32 Ω at 0.2% THD+N
Volume Range ..... -80.0 to +8.0 dB in 0.5 dB increments

Bass Management
High-Pass Slope (Bookshelf speaker) ..... 12 dB/octave (2nd order)
Low-Pass Slope (Subwoofer) ..... 24 dB/octave (4th order)
Crossover Frequency (High-pass/Low-pass) ..... 80 Hz

Tone Control
Bass Turnover Frequency ..... 100 Hz
Treble Turnover Frequency ..... 6 kHz
Range ..... ±12 dB

Channel Separation (at 1 kHz) ..... 94 dB
Crosstalk Between Inputs (at 1 kHz) ..... 86 dB

Frequency Response and Bandwidth
Main Outputs ..... 20 Hz to 20 kHz (±0.2 dB), 1 Hz to 120 kHz (+0 -3 dB)
Record Outputs ..... 10 Hz to 20 kHz (+0 -0.2 dB), DC to 150 kHz (+0 -3 dB)

THD+N (1 kHz, rated input and output, 80 kHz BW)
Main Outputs 0.005%
Record Outputs 0.001%

IMD (CCIF at 15 kHz and 16 kHz)
Main Outputs 0.002%
Record Outputs 0.001%

S/N Ratio (A-weighted)
Main Outputs ..... 100 dB
Record Outputs ..... 112 dB

FM TUNER

Sensitivity 50 dB S/N ..... 13 dBμ typical, 25 dBμ max.
IHF ..... 10 dBμ typical, 20 dBμ max.

S/N Ratio Mono ..... 75 dB typical, 65 dB min.
Stereo ..... 69 dB typical, 60 dB min.

Distortion Mono ..... 0.2% typical, 1.0% max.
Stereo ..... 0.3% typical, 1.5% max.

Stereo Separation ..... 40 dB typical, 25 dB min.
Adjacent Channel Selectivity (±400 kHz) ..... 70 dB typical, 60 dB min.
Frequency Response ..... 25 Hz to 15 kHz (+0 -2 dB)

AM TUNER

Sensitivity (20 dB S/N) ..... 49 dBμ typical, 56 dBμ max.
S/N Ratio ..... 50 dB typical, 43 dB min.
Distortion ..... 0.7% typical, 2.0% max.
One-Signal Selectivity (±10 kHz) ..... 24 dB typical, 18 dB min.

CONTROL

Trigger Output
Jack ..... 3.5 mm mono (tip positive, sleeve ground)
Maximum Output ..... 50 mA at 12 VDC

POWER REQUIREMENTS

Supply Voltage ..... 105 to 130 V, 60 Hz
Power Consumption ..... Maximum 25 W
Fuse Rating ..... 500 mA slow-blow 5 x 20 mm

DIMENSIONS

Height ..... 4-1/8 inches (10.5 cm) including feet
Width ..... 17-1/4 inches (43.8 cm)
Depth ..... 11-1/4 inches (28.6 cm)
Weight (unpacked) ..... 14 lb (6.4 kg)

MCA 20

MCA 30

MCA 50

PVA 2

PVA 5

PVA 7

Optional Rack Kits
Available for most models
(See Dealer for more information.)

MCA 20 / 30 / 50

INPUTS

MCA 20 . . . . . 2 Single-Ended, 2 Balanced, 1 Relay Trigger (3.5-mm Mono Jack)
MCA 30 . . . . . 3 Single-Ended, 3 Balanced, 1 Relay Trigger (3.5-mm Mono Jack)
MCA 50 . . . . . 5 Single-Ended, 5 Balanced, 1 Relay Trigger (3.5-mm Mono Jack)

OUTPUTS

MCA 20 . . . . . 2 Pairs Speaker Binding Posts, 1 Relay Trigger (3.5-mm Mono Jack)
MCA 30 . . . . . 3 Pairs Speaker Binding Posts, 1 Relay Trigger (3.5-mm Mono Jack)
MCA 50 . . . . . 5 Pairs Speaker Binding Posts, 1 Relay Trigger (3.5-mm Mono Jack)

SWITCHES

Front Panel . . . . . Power On/Off
Rear Panel . . . . . 3 On/Off Modes (Trigger, Manual, Auto)

THD + N . . . . . 0.0015% at 1 kHz, 0.03% at 20 kHz
(100 W into 8 Ω)

POWER OUTPUT

(Continuous RMS, 20 Hz to 20 kHz, <1.0% THD, AC line voltage held constant at full load)

Impedance	8 Ω		4 Ω		2 Ω	
# of Channels Driven	1	All	1	All	1	All
MCA 20	225 W	200 W	370 W	300 W	535 W	410 W
MCA 30	225 W	180 W	375 W	265 W	550 W	340 W
MCA 50	225 W	180 W	370 W	265 W	535 W	340 W*

**Special Test Conditions Required*

HEADROOM . . . . . 1.45 dB (8 Ω), 2.3 dB (4 Ω)
POWER BANDWIDTH . . . . . 10 Hz to 80 kHz (200 W at 8 Ω)
FREQUENCY RESPONSE . . . . . 20 Hz to 20 kHz (-0.15 dB), 5 Hz to 100 kHz (-2 dB)
INPUT SENSITIVITY . . . . . 1.5 Vrms for 225 W into 8 Ω
INPUT IMPEDANCE . . . . . 10 kΩ (RCA), 15 kΩ (XLR)
DAMPING FACTOR . . . . . 130 at 1 kHz (ref. 8 Ω)
S/N RATIO . . . . . 120 dB A-weighted (ref. 225 W)
CHANNEL SEPARATION . . . . . >65 dB (100 Hz to 10 kHz)
VOLTAGE GAIN . . . . . 29 dB
SLEW RATE . . . . . 20 V/µs

POWER REQUIREMENTS

MCA 20 . . . . . 800 W at maximum power output (8 Ω load)
MCA 30 . . . . . 1100 W at maximum power output (8 Ω load)
MCA 50 . . . . . 1800 W at maximum power output (8 Ω load)

DIMENSIONS

MCA 20 . . . . . 7-5/8″ (19.4 cm) High x 17-1/4″ (43.8 cm) Wide x 12-1/4″ (31 cm) Deep
MCA 30 . . . . . 7-5/8″ (19.4 cm) High x 17-1/4″ (43.8 cm) Wide x 12-1/4″ (31 cm) Deep
MCA 20 / 30 . . . . . Rack-mounting: 4 rack units, without feet
MCA 50 . . . . . 7-5/8″ (19.4 cm) High x 17-1/4″ (43.8 cm) Wide x 17-1/2″ (44.5 cm) Deep
Heights include feet

WEIGHT (unpacked)

MCA 20 . . . . . 35 lb (16 kg)
MCA 30 . . . . . 41 lb (18.5 kg)
MCA 50 . . . . . 61 lb (27.5 kg)

PVA 2 / 5 / 7

INPUTS

PVA 2 . . . . . 2 Single-ended, 1 Relay Trigger (3.5-mm Mono Jack)
PVA 5 . . . . . 5 Single-ended, 1 Relay Trigger (3.5-mm Mono Jack)
PVA 7 . . . . . 7 Single-ended, 1 Relay Trigger (3.5-mm Mono Jack)

OUTPUTS

PVA 2 . . . . . 2 Pairs Speaker Binding Posts, 1 Relay Trigger (3.5-mm Mono Jack)
PVA 5 . . . . . 5 Pairs Speaker Binding Posts, 1 Relay Trigger (3.5-mm Mono Jack)
PVA 7 . . . . . 7 Pairs Speaker Binding Posts, 1 Relay Trigger (3.5-mm Mono Jack)

SWITCHES

Front Panel . . . . . Power On/Off
Rear Panel . . . . . 3 On/Off Modes (Trigger, Manual, Auto)

THD + N . . . . . 0.002% at 1 kHz, 0.03% at 20 kHz
(100 W into 8 Ω)

POWER OUTPUT

(Continuous RMS, 20 Hz to 20 kHz, <1.0% THD, AC line voltage held constant at full load)

Impedance	8 Ω Ω		4 ΩΩ		2 Ω Ω	
# of Channels Driven	1	All	1	All	1	All
PVA 2, PVA 5, PVA 7	125 W	105 W	200 W	140 W	300 W	—

HEADROOM . . . . . 1.25 dB (8 Ω), 2.13 dB (4 Ω)
POWER BANDWIDTH . . . . . 10 Hz to 80 kHz (125 W at 8 Ω)
FREQUENCY RESPONSE . . . . . 20 Hz to 20 kHz (-0.20 dB), 5 Hz to 100 kHz (-2.5 dB)
INPUT SENSITIVITY . . . . . 1.12 Vrms for 125 W into 8 Ω
INPUT IMPEDANCE . . . . . 10 kΩ
DAMPING FACTOR . . . . . 200 at 1 kHz (ref. 8 Ω)
S/N RATIO . . . . . 122 dB, A-weighted (ref. 125 W)
CHANNEL SEPARATION . . . . . >65 dB (100 Hz to 10 kHz)
VOLTAGE GAIN . . . . . 29 dB
SLEW RATE . . . . . 28 V/µs

POWER REQUIREMENTS

PVA 2 . . . . . 500 W at maximum power output (8 Ω load)
PVA 5 . . . . . 1125 W at maximum power output (8 Ω load)
PVA 7 . . . . . 1500 W at maximum power output (8 Ω load)

DIMENSIONS

PVA 2 . . . . . 5-7/8″ (14.9 cm) High x 17-1/4″ (43.8 cm) Wide x 11″ (28 cm) Deep
PVA 5 . . . . . 5-7/8″ (14.9 cm) High x 17-1/4″ (43.8 cm) Wide x 13-1/4″ (33.5 cm) Deep
PVA 2 / 5 . . . . . Rack-mounting: 3 rack units, without feet
PVA 7 . . . . . 5-7/8″ (14.9 cm) High x 17-1/4″ (43.8 cm) Wide x 16-3/8″ (42 cm) Deep
(Heights include feet)

WEIGHT (unpacked)

PVA 2 . . . . . 26 lb (12 kg)
PVA 5 . . . . . 36 lb (16.5 kg)
PVA 7 . . . . . 47.5 lb (21.5 kg)

All Anthem™ amplifiers feature our ALM™ (Advanced Load Monitoring) circuitry. For complete details see specifications page for P2 and P5 amplifiers.

ANTHEM STATEMENT

"… intoxicating … the D1 just floored us … 'Is this really digital audio?' I kept asking … 'it sounds so darn ANALOG' … so transparent I ceased to 'notice' it … insane exploitation of the CD's dynamic range … I just can't take any portion of the audio spectrum and pigeon-hole it for you … everything is just right … a huge winner … YES, IT'S THAT GOOD." – Brian Florian, Secrets of Home Theater and High Fidelity on the D1

"… the best home-theater components I have heard in my system … The D1 exhibits such incredible clarity, detail, openness, and presence … vocals—were not reproduced; they were 'recreated' in my listening room … pinpoint placement of effects … The P5 is the 'poster child' for high-current amplifiers … complements the performance of the D1 in every respect … effortless … exceptional control over the speakers … I'm sure it never even broke a sweat … This is audio at its finest. Run, don't walk to your nearest Anthem Dealer." – Gary Altunian, The Perfect Vision on the D1

"… fabulous … possibly the best all around AV preamp on the market … open, dynamic and effortless … lusciously detailed … spectacular with blockbuster films … stunning detail … three dimensional and exciting … my system has never sounded better than with the D1 at the reins."
– Christopher Zell, AudioVideo Revolution on the D1

"… superb … an open, airy quality … lush … natural … punchy and clean … just the right degree of warmth … sparkled with realistic detail … a refined sense of air and space … solid imaging … excellent depth … large, majestic soundstage … entirely believeable … startlingly powerful … equal to or better than the best I've yet heard …" – Thomas J. Norton, Stereophile UltimateAV on the D1

"Anthem has totally hit a home run … I can't think of a better processor … sound is neutral — and very full … top end is well defined … full, clear and revealing … mid range is also well detailed and neutral … Bass is full and defined … very, very impressive performance …" – Manoj Motwani, HDTVetc. on the D1

"The P5 leaves little to say … has a tendency to leave you somewhat speechless in the amount of power and performance delivered … such enormous performance and value for the dollar that it has to be auditioned … Highly recommended."
– Manoj Motwani, HDTVetc. on the P5

"An amp and a half … detail to die for … iron-fisted control of the speakers … power for any practical application (and some not-so-practical ones!) … I can't imagine anyone finding the tank-like P5 lacking in any respect …" – Thomas J. Norton, Stereophile UltimateAV on the P5

"… big, heavy, and pretty much unbreakable … what does that mean in terms of audio quality? … To put it simply: Amazing! … will produce the full dynamic range without even breaking a sweat … there is not a single source, media type, or genre that the P5 will not complement … looks impressive, sounds impressive … is impressive … a stellar performer … actually surpassed my reference."
– Sandy Bird, Secrets of Home Theater and High Fidelity on the P5

"… the P2 RULES! … beautiful power … set to redefine the concept of value in the audiophile world …" – Jason Thorpe, SoundStage! on the P2

ANTHEM

"… irresistible … rock-solid and very detailed imaging from all multichannel sources —and all types of music, from soundtracks to operas … among the front rank of top-performance preamps."
– David Ranada, Sound & Vision on the AVM 30

"… competes with the highest priced preamps … incredibly detailed … crystal clear … heart thumping energy … great presence … great resolution and control … paints an aural landscape … soulful and tasteful … thundering bass … wonderful midrange and lower register … may well be the brightest contender on the price and performance landscape."
– Tim Hart, AudioVideo Revolution on the AVM 30

"… outstanding … reproduction was flawless … stunningly tangible … neutral, precise, detailed … seamless and enveloping … incredible dynamics … capable of driving even the most complex systems … remarkable performance … among the world's best … a must listen, even if your budget far exceeds its going price."
– Pascal Tran, Québec Audio Video on the AVM 30

"… performs at the highest level … [its] price suggests it should be considered in the middle of the highly competitive AV preamp marketplace, yet its performance competes with the cost-no-object big boys."
*– Bryan Southard, AudioVideo Revolution**

"… SSP bliss … Anthem is to be commended … an incredibly complete surround sound processor … flawless … exquisite … a statement piece … a statement about all that is important, useful, and desirable in a surround sound processor."
*– Brian Florian, Secrets of Home Theater and High Fidelity**

"… a superb piece … incredibly refreshing … exceptionally well-rounded … intelligently thought-out … in the realm of truly good SSP units, I have yet to meet a rival."
*– Colin Miller, Secrets of Home Theater and High Fidelity**

"… phenomenally impressive …"
*– Wes Phillips, onhometheater**

"… the Anthem combo was the clear winner … a cut above for music … delivered more real estate and dynamics … greater degree of separation and isolation of independent events … crisper and cleaner … got top vote for soundtrack performance as well …"
*– Chris Lewis, Home Theater**

"… freaking awesome … The AVM 20 is flat out the best value I've ever seen in a pre-pro and the PVA amp is a perfect match … for not much more than a high-end receiver you can step way up in class."
*– Mike McGann, E-GEAR**

"WARNING: Anthem gear may be addictive … stylish … sophisticated … sharply detailed and focused … a fast, clean, clear presentation … the TLP 1 will deliver everything you could possibly need to tailor your system just the way you want it."
– Eric D. Hetherington, GoodSound on the TLP 1

"… loaded with features … easy musical flow … eminently enjoyable … the value offered by the TLP 1 is well off the charts."
– John Crossett, SoundStage! on the TLP 1

"… this preamplifier was performing fantastically for its price … accurate and very detailed … rhythmic and easy to listen to … soundstage was tight … instruments were well placed … the cornerstone of a very high-performing system …"
– Brian Kahn, AudioVideo Revolution on the TLP 1

"… the smoothness of the Anthem components will seduce you … coherence … clarity … naturalness … dialogue breathes freely — never sounds boxed in … strikingly realistic … amazing range … remarkable depth … precise instrumental separation … simply outstanding …"
– Robert Lussier, Québec Audio Video on the TLP 1 / PVA 2

"… the best sonic bargain I've yet to find … this winning combination of matched gear may be impossible to beat at its price point … Within its price range, the TLP 1 is the best preamp I have yet had the pleasure to review … this power amp performed flawlessly … I would be hard-pressed to come up with a superior alternative combo or separates at this price."
– James T. Frane, The Audiophile Voice on the TLP 1 / PVA 2

"The PVA 7's fleet-of-foot nature maintained the recording's quality with ease … truly live and inviting … immediate and instantaneous … kept pace with complex soundtrack material … detail was preserved intact … excellent impact and transient speed … could easily handle the format and seven speakers without losing control … pretty incredible."
– Jeff Fritz, Home Theater & Sound on the PVA 7

"What do you say about a product that exceeds all expectations for its price category? … I've not heard an amplifier that's significantly better at anywhere near its price."
– Shane Buettner, The Perfect Vision on the PVA 7

"… a standout … good sense of depth … dynamics were excellent … boy, was it quiet!"
– Robert Deutsch, Stereophile Guide to Home Theater on the PVA 7

"… remarkable … at the top of its peer group." – Tim Hart, Audio Revolution on the PVA 7

"… I was elated … lovely, natural, and neutral … remarkable silence and poise … an incredible S/N ratio of -122 dB … Good grief! That's as good as no noise at all … a background of deliciously sonically black silence."
– Brian Florian, Secrets of Home Theater and High Fidelity on the PVA 7

"… very refined … good resolution and depth … spacious and focused … smooth and pleasurable …"
– Wayne Garcia, The Absolute Sound on the PVA 7

"WOW … what a sense of power and size … vivid and detailed … brings the music right to you—there's no having to aurally search for musical information via this amp … Anthem has once again demonstrated that they plan to continue defining affordable high-end performance."
– John Crossett, SoundStage! on the PVA 2

"… astoundingly well reproduced … realistically portrayed … fast and detailed … very clean … highs were nicely extended … timber was right on … soundstage was consistently wide and close to the listener … image was rock-solid … extremely energetic … I felt incredibly involved with the performance."
– Brian Kahn, Audio Revolution on the PVA 2

"… remarkable … fast and transparent … enveloping and realistic … power and authority … incredible dynamics … thunderous bass … plays—without strain … one of the more refined amplifiers that I have heard at anywhere near this price …"
– Roger Kanno, SoundStage! on the MCA 5

"… exceptional … startling precision and authority … exceedingly clean and detailed … plenty of power … excellent frequency response … able to deliver unexpected thrills … at a price that begs for auditioning." – Doug Schneider, SoundStage! on the MCA 5

"… one of the few true high-output audiophile-quality, multi-channel power amplifiers on the market today … an endless supply of sheer power."
– Alan L. Maier, SMR Home Theater on the MCA 5

**Some highlights are from a previous generation. Model has been further improved for even better sound.*

“WARNING: ANTHEM GEAR MAY BE ADDICTIVE.”

– Eric D. Hetherington, GoodSound!

FINISHES

• Anthem

• Anthem
• Anthem Statement

SONIC FRONTIERS INTERNATIONAL
BREAKING THE SOUND BARRIER

Designed and manufactured in North America. For further information or to contact us visit our website at **www.anthemAV.com** or **www.statement.anthemAV.com** or e-mail us at sfi@sonicfrontiers.com

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